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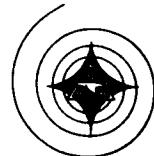
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DATA REPORT FOR APOLLO FORCE
MODEL (FS-2) IN NAA TRISONIC WIND
TUNNEL (TWT 74)

NAS 9-150
(U)

45.5.1
2 August 1962

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D. J. Gidea
D. J. Gidea - Manager
Flight Technology

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FOREWORD

The tests described herein were conducted under NASA Apollo Contract NAS 9-150, during the period from April 25 to May 1, 1962.

This report was prepared by D. G. Cummings of the Wind Tunnel Projects Group, Los Angeles Division.

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**ABSTRACT**

This report contains results of force tests of 0.105-scale Apollo model FS-2. The tests were conducted in the North American Aviation 7 x 7 foot Trisonic Wind Tunnel at nominal Mach numbers of 0.7, 0.9, 1.2, 1.5, 2.0 and 3.5.

Presented in this report are body-axis and stability-axis force data for all valid runs. A description of the configurations tested and a key to reading the tabulated data are included.

This report presents basic wind tunnel test data only in order to make the test results available at the earliest possible date. Analyses and summary of results will be reported later under separate cover.



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I. INTRODUCTION

Transonic and supersonic wind tunnel tests of the 0.105 scale Apollo force model FS-2 were conducted to investigate the static stability characteristics, at high Reynolds number, of the launch escape system. The launch escape system was tested over an angle of attack range of -10° to $+51^\circ$, at nominal Mach numbers of .7, .9, 1.2, 1.5, 2.0 and 3.5.

Pretest information was given in Reference (a).

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II. REMARKS

Five configurations were tested in Trisonic wind tunnel consisting of command module and escape tower assembly with variations in the escape motor configurations. The base configuration (without a stability disc) was tested at $M = 1.5$ only and was identical to the configuration tested at Ames (Reference c). The four other configurations were obtained by adding various discs to the base of the escape motor skirt as shown on pages 7 and 8. These configurations were tested from $M = .7$ to 2.0 .

Because poor valve control was experienced on the initial runs of this test, it was necessary to rerun the data obtained $M = .9$ and 1.2 . However, the $M = 1.2$ data at angles of attack between 10° and 30° remained erratic in spite of good valve control. This effect probably occurs because the blockage created at these angles of attack in the low supersonic Mach number range does not allow a correct wake to form behind the model.

A summary of completed runs and configurations tested is contained in Appendix "A".

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III. MODEL DESCRIPTION

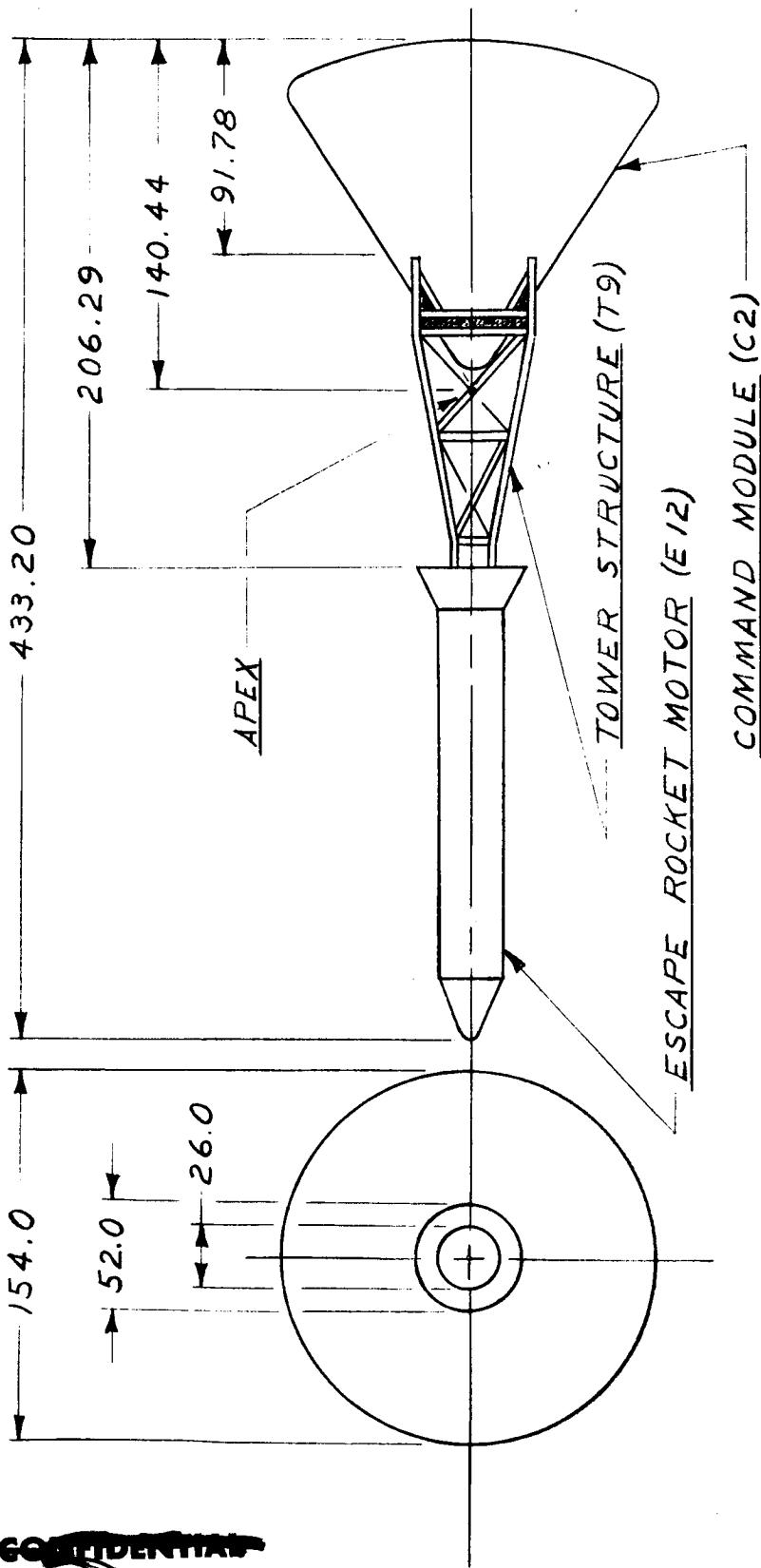
A. General

The FS-2 model was a 0.105 scale representation of the Apollo vehicle. Two basic command modules, identical except for the angle between the module axis of symmetry and the center line of the balance, were used to cover the required angle range. These modules were constructed to accept the escape tower configuration and various detachable escape motor configurations shown on pages 6, 7 and 8 of this report.

Structural analysis of the basic model is contained in Reference (b), and detailed model drawings are included in Reference (a).

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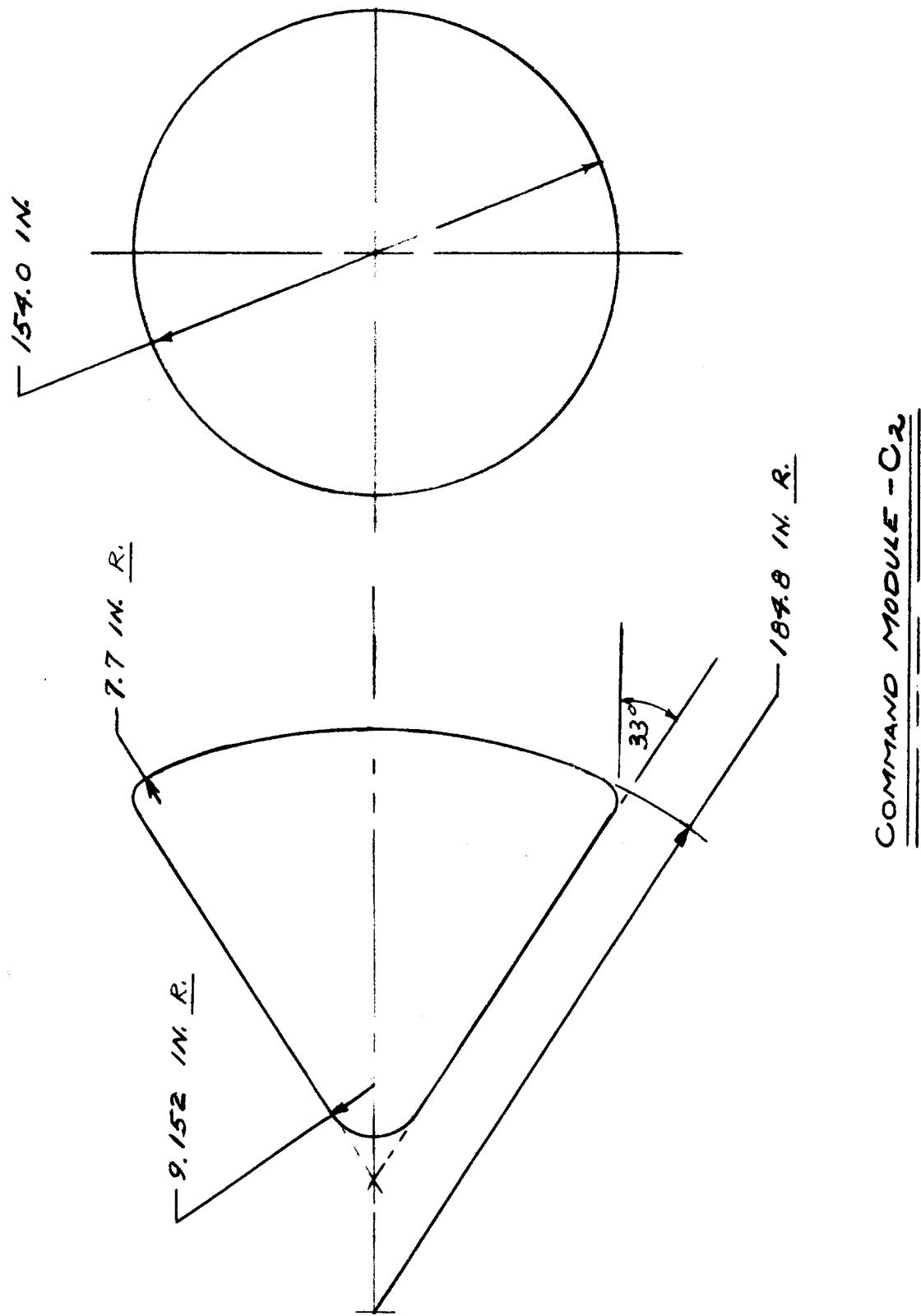
NORT



GENERAL ARRANGEMENT SKETCH

NOTE: DWG. NOT TO SCALE
DIMENSIONS ARE FULL SCALE INCHES

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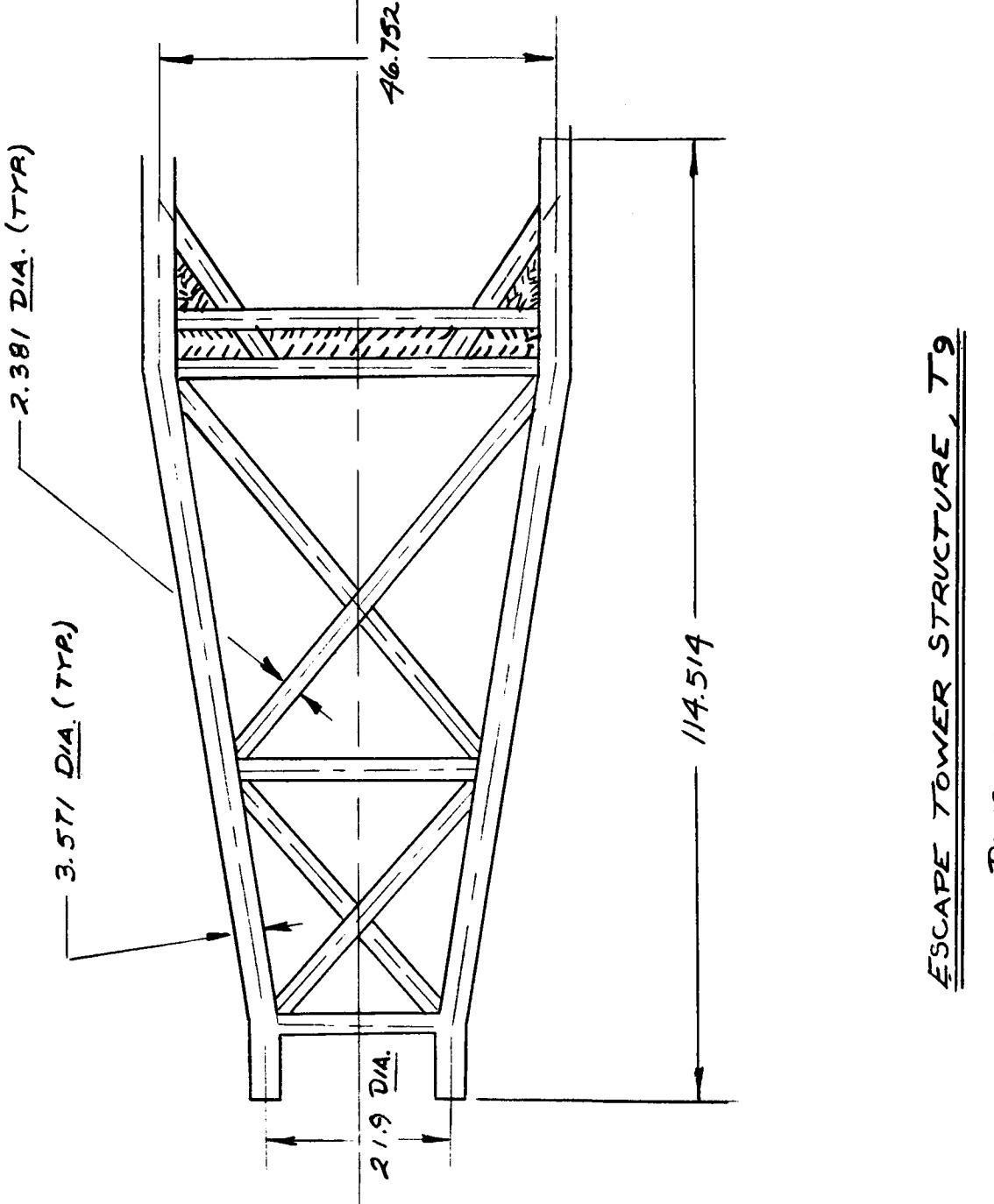




III. MODEL DESCRIPTION - continued

~~CONFIDENTIAL~~

B. Nomenclature Sketches - continued

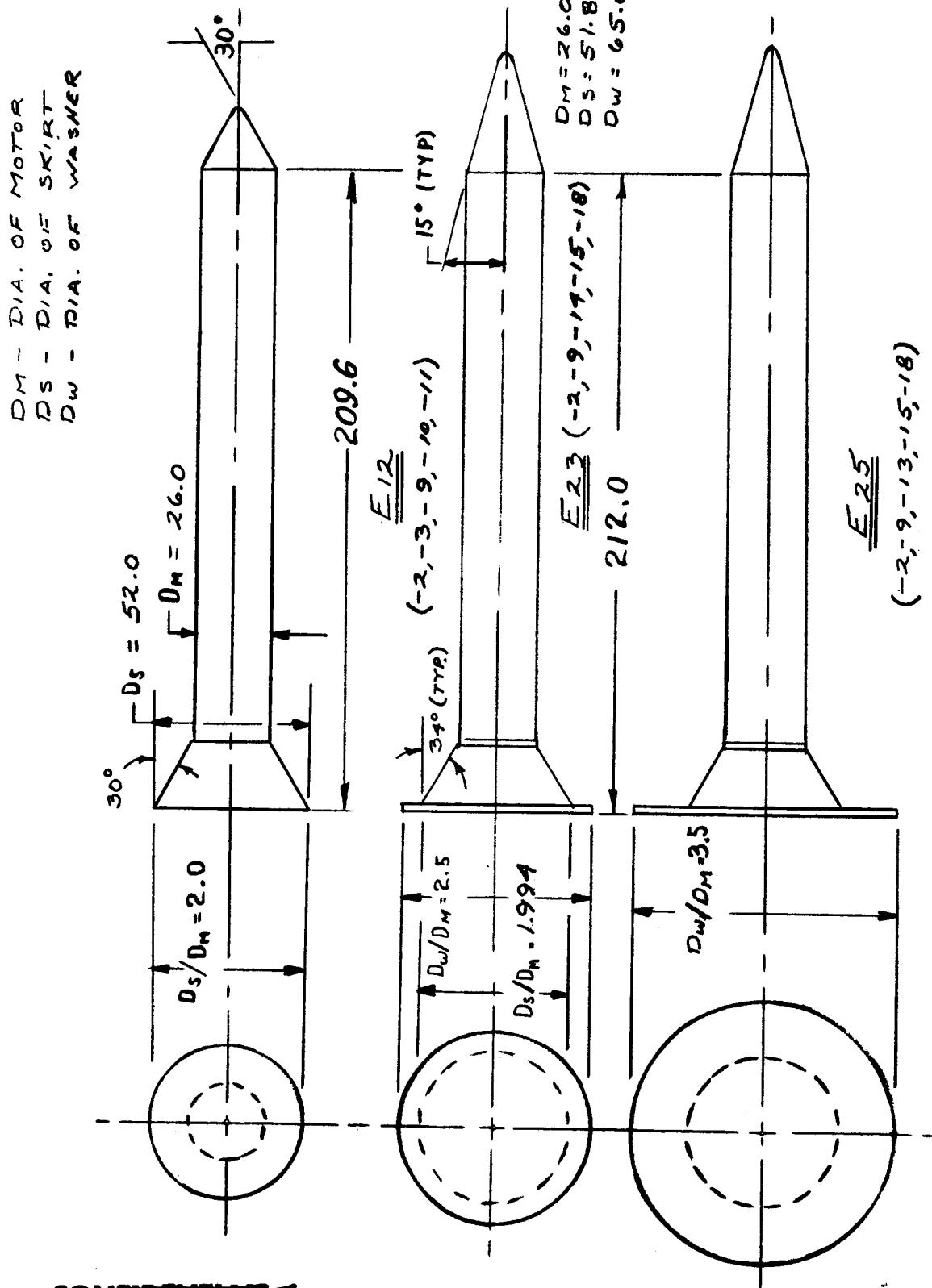


SCALE 1:0



III. MODEL DESCRIPTION - continued

B. Nomenclature Sketches - continued



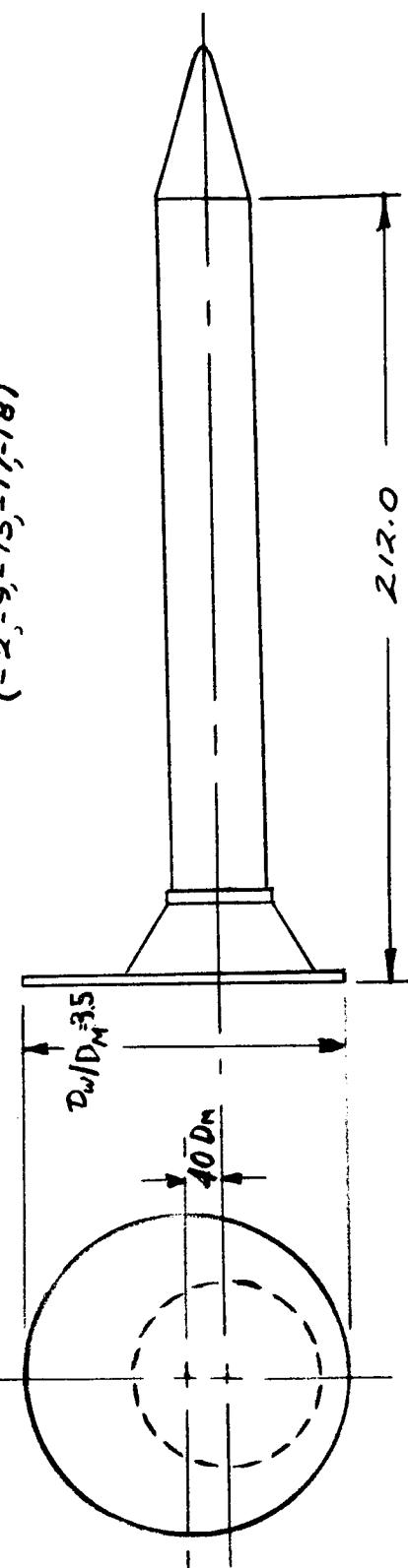
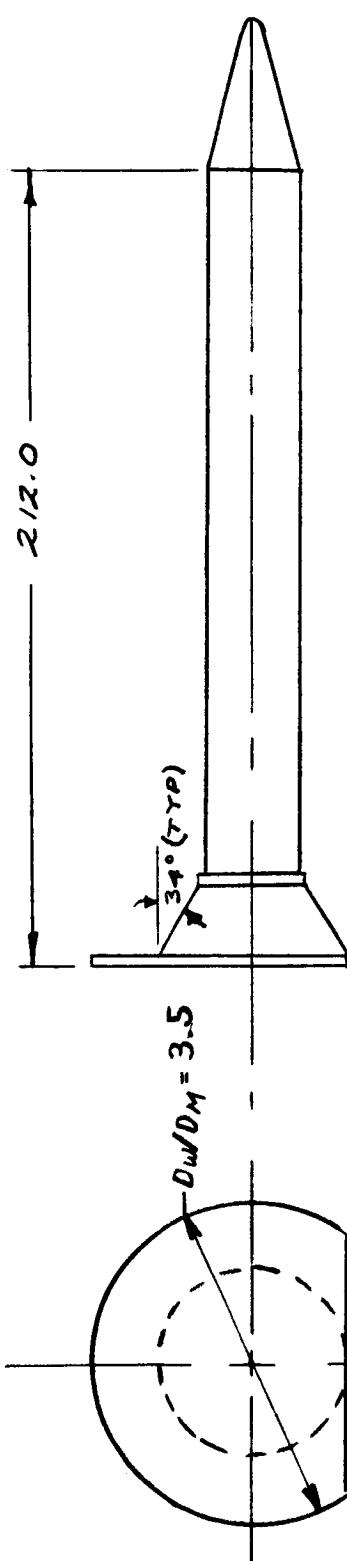
ROCKET MOTOR CONFIGURATIONS TESTED
Dwg. 7121-01080

NOTE :
 1) NOT TO SCALE
 2) DASH NO'S ARE
 CALLED OUT WITH
 CONFIG.



III. MODEL DESCRIPTION - continued

B. Nomenclature Sketches - continued



ROCKET MOTOR CONFIGURATION TESTED - CONT.
Dwg. 7/21 - 01080 (-2,-9,-15,-18,-19)

NOTE
1) NOT TO SCALE
2) DASH NO'S ARE
CALLED OUT WITH
CON FIG.



[Redacted]

IV. TEST PROCEDURE

A. Test Nomenclature

- Mo = Test section free stream Mach number
Po = Test section free stream static pressure, PSFA
Ho = Test section total pressure, PSFA
TTo = Test section free stream total temperature, °R
Q = Test section free stream dynamic pressure, PSF
RN = Test section Reynolds Number $\times 10^{-6}$
CA = Axial force coefficient
CN = Normal force coefficient
C_{NB} = Yawing moment coefficient (body axis)
CL_B = Rolling moment coefficient (body axis)
XCPN = Location of the normal force center of pressure divided by the command module diameter, measured from the command module apex, positive forward.
XCPY = Location of the side force center of pressure divided by the command module diameter, measured from the command module apex, position forward.
PBC = Balance chamber pressure coefficient, $(PBC - Po)/Q$
CMA = Pitching moment coefficient about command module apex
CD = Drag coefficient
CL = Lift coefficient
CMS = Pitching moment coefficient about the C.G.

**CONFIDENTIAL****IV. TEST PROCEDURE - continued****A. Test Nomenclature - continued**

- CY = Side force coefficient
- CLS = Rolling moment coefficient (stability axis)
- CNS = Yawing moment coefficient (stability axis)
- L/D = Lift to Drag ratio
- θ = Angle between balance \mathbf{f} and model \mathbf{f} , deg.
- ψ = Angle of yaw, deg.
- α = Angle of attack, deg.
- \bar{x} = Distance along model \mathbf{f} from command module to C.G., inches, negative when a.t of apex
- \bar{z} = Perpendicular distance from model \mathbf{f} to C.G., inches, positive when below model center line
- a = Distance along balance \mathbf{f} from C.G. to N1 gage, inches, positive when forward of C.G.
- d = Distance along balance \mathbf{f} from C.G. to N2 gage, inches, positive when forward of C.G.
- f = Distance along balance \mathbf{f} from C.G. to Y1 gage, inches, positive when forward of C.G.
- g = Distance along balance \mathbf{f} from C.G. to Y2 gage, inches, positive when forward of C.G.
- e = Perpendicular distance from balance \mathbf{f} to C.G., inches, positive when above C.G.
- N1 = Forward normal force, lbs.
- N2 = Aft normal force, lbs.

**CONFIDENTIAL****IV. TEST PROCEDURE - continued****A. Test Nomenclature - continued**

Y_1 = Forward side force, lbs.

Y_2 = Aft side force, lbs.

C = Chord force, lbs.

D = Command module maximum diameter, inches

S_n = Command module maximum cross-sectional area, ft^2

B. Model Installation

The FS-2 model was installed on the 7121-01082 sting. H-998 fixed sting support, on the H-822-3 sector head. The sector was located such that the center of rotation was at tunnel station 3735 when testing transonically.

Upon completion of the transonic test, the sector was repositioned for supersonic testing with the center of rotation at tunnel station 3563.

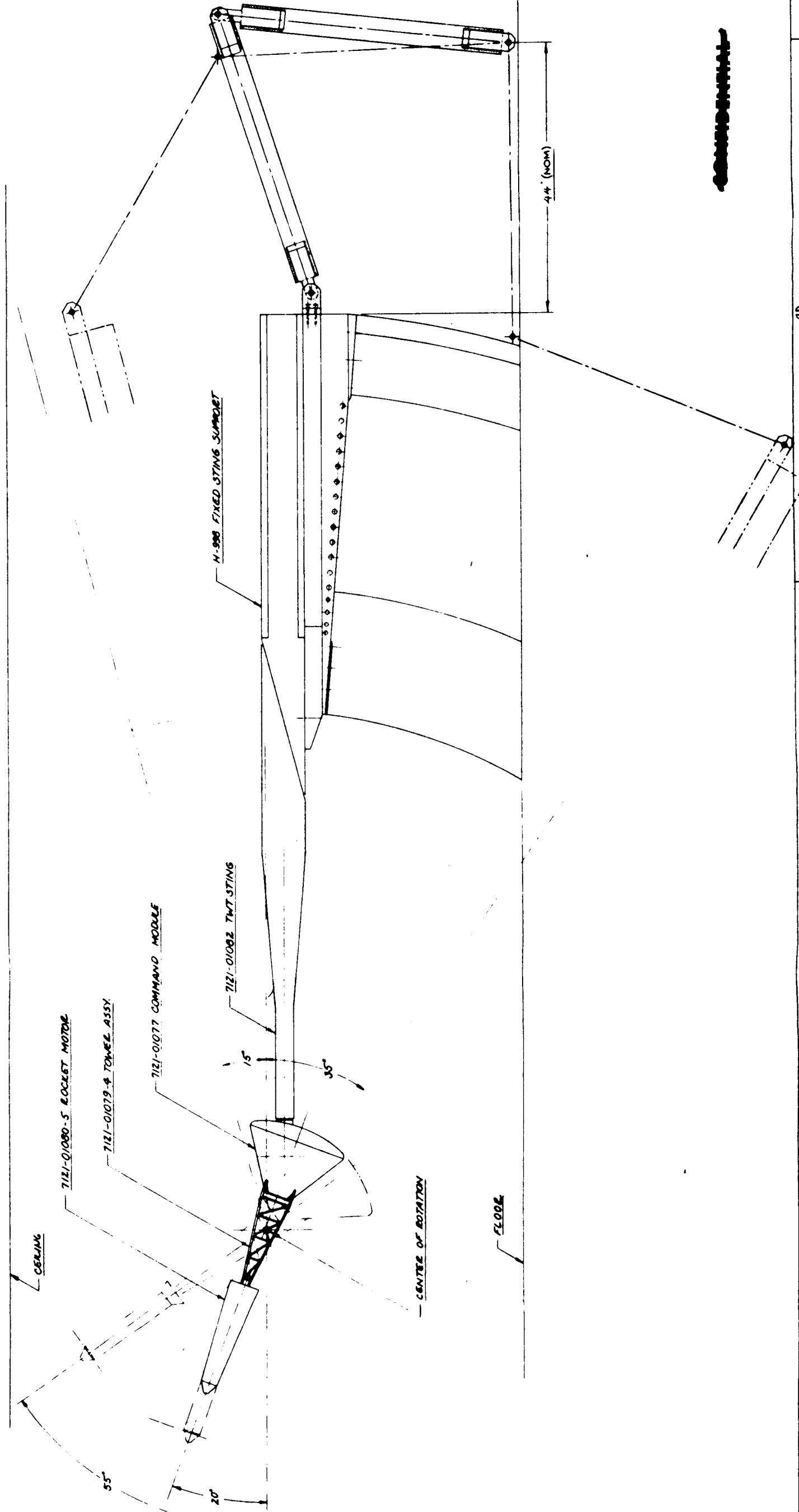
The basic angle range of the sting support system is -10° to $+31^\circ$ using the launch escape system configuration.

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7121-01084

7121-01084

| | | |
|-------------|---------|----------------|
| DATE | 3-12-23 | 721-SONIC W/T. |
| BY WH | APOLLO | INSTALLED. |
| CHEK BY | | F-3-2 APOLLO |
| APPROV BY | | F-2023 MODEL |
| APPROV DATE | 1/05 | 7121-01084 |





IV. TEST PROCEDURE - continued

C. Instrumentation

Six component force data were measured by the revised 2-3/4" Task MK IA internal balance. The output of each element of the balance was recorded on the TWT data system. ALWAC program A033 was used to reduce the data from the data master tape on the TWT ALWAC III-E digital computer.

Balance chamber pressure was measured by the pressure instrumentation existing in the balance, with a Statham differential pressure transducer, type PM ± 5-700 (5 PSID), referenced to the pre-selected pressure of the R1 reference system. This pressure was measured and noted to indicate the presence of sting interference should it occur. No corrections based on balance chamber pressure were applied to the data.

Black and white schlieren photographs were taken during the supersonic portions of this test.

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IV. TEST PROCEDURE - continued

D. Data Reduction Constants

Force and moment coefficients were computed based on the following geometric constants.

$$S\pi = 1.4261 \text{ ft}^2$$

$$D = 16.170 \text{ in.}$$

\bar{x} = -5.102 in. (Launch escape system) nominal value

z = 0.711 in. (Launch escape system)

E. Moment Transfer Dimensions

The moment transfer distances in inches are tabulated with their respective balance cavity angle for launch escape system configurations. The dimensions are graphically presented on the following page.

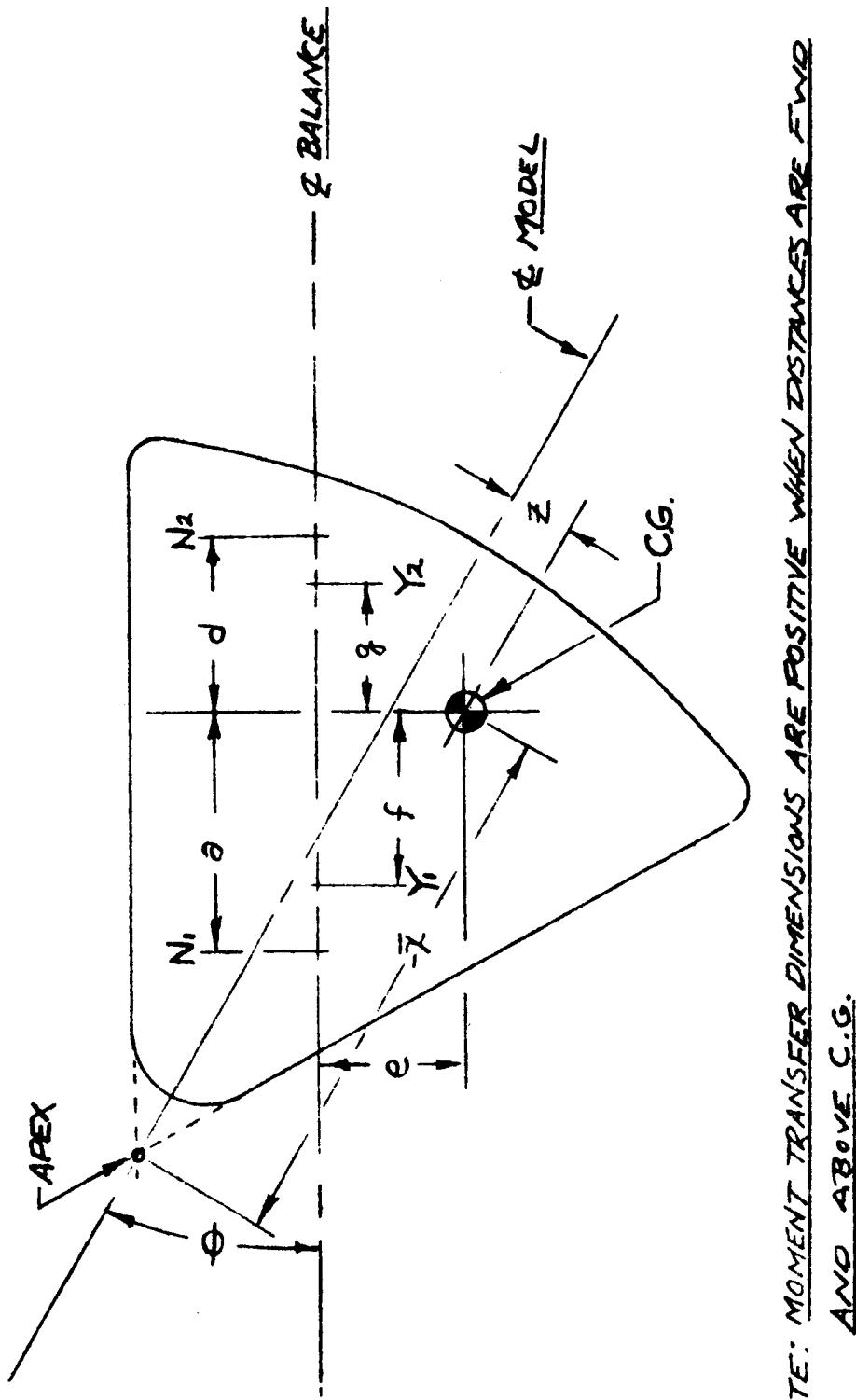
Launch escape system

| θ | e | a | d | f | g | \bar{x}^* |
|----------|-------|--------|----------|--------|---------|-------------|
| 0° | .7115 | .9560 | - 9.0440 | .1430 | -8.2310 | -5.069 |
| 20° | .1120 | -.0879 | -10.0879 | -.9009 | -9.2749 | -4.877 |

*These values of \bar{x} were used in the calculation of X_{cp} instead of the nominal value of -5.102. They were obtained from actual measurements of the location of the command apex using the heat shield surface as a reference.

IV TEST PROCEDURE - CONTINUED

DATA REDUCTION
MOMENT TRANSFER DEFINITION SKETCH





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V. REFERENCE

- (a) SID-62-353 "Pretest Report for the 0.105 Scale Apollo Force Model (FS-2) in NAA Trisonic Wind Tunnel", 20 March 1962
- (b) SID-62-104 "Structural Analysis of the 0.105 Scale Apollo Wind Tunnel Model"
- (c) SID-62-601 "Data Report for Apollo Model (FS-2) in the Ames Unitary Plan Wind Tunnels"

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APPENDIX "A"

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TABULATED DATA FORMAT

The key to reading the tabulated data is as follows:

1. The first two lines at the top of each page contain the following identification.

TWT 74 = Trisonic Wind Tunnel Test No. 74

Blow xx = The blow number

Config. T9ExxC2 = Configuration tested

2. First Page - Tunnel conditions

BN = Block number, identifies block of data computed.

Alpha = Angle of attack, deg.

Yaw = Angle of yaw, deg.

Mach = Test section Mach number

RN = Reynold's number $\times 10^{-6}$ (based on command module diameter, 16.170 inches)

Ho = Test section total pressure, psfa

Po = Test section static pressure, psfa

Q = Test section dynamic pressure, psf

TTo = Test section total temperature, °R

Dec = Number of decimal places to the left of the last digit.

3. Second Page - Body axis data and Balance Chamber Pressure

BN = Block number, identifies block of data computed

Alpha = Angle of attack, deg.

Yaw = Angle of yaw, deg.

[REDACTED]
TABULATED DATA FORMAT - continued

CA = Axial force coefficient
CN = Normal force coefficient
CNB = Yawing moment coefficient
CLB = Rolling moment coefficient

-XCPN = Location of the normal force center of pressure divided by the command module diameter, negative sign denotes that column is multiplied by -1.

-XCPY = Location of the side force center of pressure divided by the command module diameter, negative sign denotes that column is multiplied by -1.

PBC = Balance chamber pressure coefficient
CMA = Pitching moment coefficient about the command module apex
Dec = Number of decimal places to the left of the last digit

4. Third Page - Stability axis data and Lift to Drag ratio

BN = Block number, identifies block of data computed

Alpha = Angle of attack, deg.
Yaw = Angle of yaw, deg.
CD = Drag coefficient
CL = Lift coefficient
CMS = Pitching moment coefficient, stability axis

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TABULATED DATA FORMAT - continued

CY = Side force coefficient
CNS = Yawing moment coefficient, stability axis
CLS = Rolling moment coefficient, stability axis
L/D = Lift to Drag ratio
Dec = Number of decimal places to the left of
the last digit

RUN INDEX

SUMMARY OF COMPLETED BLOWS

| Configuration | ∞ | Range | Blow Number | | | | | |
|---------------|----------|---------|-------------|--------|-----|-------|-----|-----|
| | | | 0.7 | 0.9 | 1.2 | 1.5 | 2.0 | 3.5 |
| E12T9C2 | -10° | to +10° | | | | 5 | | |
| | +10° | to +30° | | | | 10 | | |
| | | | | | | | | |
| | -10° | to +10° | 23 | 18 | 45 | 6 | 49 | |
| | -10° | to +15° | | | | | | 52 |
| | +10° | to +30° | 36 | 31 | 40 | 11 | 47 | 68 |
| | +10° | to +35° | | | | | 62 | |
| | +35° | to +51° | | | | | 53 | 59 |
| | | | | | | | 58 | |
| | | | | | | | | |
| E23T9C2 | -10° | to +10° | 24 | 19 | 29 | 7 | 66 | |
| | +10° | to +30° | 37 | 30 | 41 | 12 | | |
| | +10° | to +35° | | | | | 60 | |
| | | | | | | | | |
| E25T9C2 | -10° | to +10° | | | | | | |
| | +10° | to +30° | | | | | | |
| | +10° | to +35° | | | | | | |
| | | | | | | | | |
| E29T9C2 | -10° | to +10° | 22 | 16, 17 | 44 | 8, 15 | 67 | |
| | +10° | to +30° | 38 | 32 | 39 | 13 | | |
| | +10° | to +35° | | | | | 61 | |
| | | | | | | | | |
| E32T9C2 | -10° | to +10° | 21 | 20 | 43 | 9 | 65 | |
| | +10° | to +30° | 35 | 33 | 42 | 14 | | |
| | +10° | to +35° | | | | | 63 | 64 |
| | | | | | | | | |

See page 7 and 8 for rocket motor configurations tested.

TWT 74 BLOW 5 5TH REDUCTION

CONFIG T9E12C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | O | TTO |
|------------|-------|------|------|------|-------|-------|------|-----|
| DEC = | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 635 - 1029 | | 1528 | 1396 | 4629 | 12108 | 19789 | 5157 | |
| 756 - 799 | | 1528 | 1427 | 4715 | 12331 | 20154 | 5143 | |
| 773 - 641 | | 1528 | 1434 | 4733 | 12379 | 20231 | 5140 | |
| 785 - 927 | | 1528 | 1437 | 4739 | 12395 | 20257 | 5136 | |
| 797 - 412 | | 1528 | 1436 | 4737 | 12388 | 20246 | 5136 | |
| 809 - 302 | | 1528 | 1436 | 4731 | 12372 | 20221 | 5139 | |
| 819 - 207 | | 1528 | 1442 | 4749 | 12420 | 20298 | 5131 | |
| 831 - 93 | | 1528 | 1440 | 4740 | 12397 | 20260 | 5130 | |
| 843 - 23 | | 1528 | 1445 | 4759 | 12431 | 20317 | 5126 | |
| 854 - 127 | | 1528 | 1443 | 4741 | 12400 | 20266 | 5123 | |
| 869 - 266 | | 1528 | 1444 | 4742 | 12403 | 20271 | 5119 | |
| 881 - 378 | | 1528 | 1445 | 4742 | 12401 | 20268 | 5118 | |
| 893 - 488 | | 1528 | 1443 | 4734 | 12381 | 20234 | 5116 | |
| 905 - 600 | | 1528 | 1442 | 4727 | 12363 | 20205 | 5113 | |
| 917 - 709 | | 1528 | 1441 | 4720 | 12346 | 20178 | 5111 | |
| 930 - 829 | | 1528 | 1441 | 4720 | 12346 | 20178 | 5111 | |

TWT 74 ... BLOW 5

CONFIG T9E12C2

5TH REDUCTION

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|------|-----|-------|------|------|------|-----|-----|-------|-------|-------|------|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 635 | - | 1029 | 9545 | - | 3127 | 13 | 1 | 5499 | 8319 | - | 2867 | |
| 756 | - | 799 | 9238 | - | 2639 | 16 | 2 | 5945 | 16599 | - | 3036 | |
| 773 | - | 641 | 8865 | - | 2272 | 26 | 1 | 6163 | 11722 | - | 3012 | |
| 785 | = | 527 | 8550 | - | 1950 | 30 | | 6291 | 12745 | - | 3052 | |
| 797 | - | 412 | 8259 | - | 1583 | 28 | | 6261 | 9424 | - | 3011 | |
| 809 | - | 302 | 8021 | - | 1138 | 28 | | 6110 | 10360 | - | 2976 | |
| 819 | - | 207 | 7844 | - | 781 | 28 | - | 1 | 5739 | 13351 | - | 2956 |
| 831 | - | 93 | 7680 | - | 356 | 21 | | 5145 | 33255 | - | 2900 | |
| 843 | 23 | | 7590 | 88 | | 14 | | 6353 | - | 7189 | 183 | |
| 854 | 127 | | 7675 | 510 | 6 | | | 5742 | - | 2679 | - | |
| 869 | 266 | | 7941 | 1055 | - | 5 | 1 | 6184 | 4040 | - | 2744 | |
| 881 | 378 | | 8141 | 1476 | - | 11 | 1 | 6410 | 4750 | - | 2749 | |
| 893 | 488 | | 8430 | 1879 | - | 8 | 1 | 6440 | 4482 | - | 2792 | |
| 905 | 600 | | 8723 | 2191 | - | 2 | - | 1 | 6332 | 3793 | - | |
| 917 | 709 | | 9024 | 2463 | - | 7 | | 6180 | 4449 | - | 2849 | |
| 930 | 829 | | 9293 | 2739 | - | 7 | - | 1 | 5986 | 4377 | - | |

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Appendix "A"

TWT 74 BLOW 5

5TH REDUCTION

CONFIG T9E12C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|-------|------|----|-----|-----|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 635 | - 1029 | 9950 | - 1371 | 1159 | - 25 | 13 | - | 1 | - 1378 |
| 756 | - 799 | 9515 | - 1329 | 1148 | - 12 | 16 | - | 2 | - 1397 |
| 773 | + 641 | 9063 | - 1268 | 1078 | - 30 | 26 | - | 2 | - 1399 |
| 785 | - 527 | 8693 | - 1158 | 992 | - 31 | 30 | - | 3 | - 1392 |
| 797 | - 412 | 8352 | - 985 | 858 | - 44 | 27 | - | 2 | - 1180 |
| 809 | - 302 | 8070 | - 714 | 691 | - 39 | 28 | - | 2 | - 885 |
| 819 | - 207 | 7867 | - 498 | 548 | - 28 | 28 | - | 2 | - 633 |
| 831 | - 93 | 7685 | - 231 | 410 | - 7 | 21 | - | 301 | |
| 843 | 23 | 7591 | 57 | 306 | 13 | 14 | | 76 | |
| 854 | 127 | 7684 | 340 | 205 | 10 | 6 | | 443 | |
| 869 | 266 | 7981 | 686 | 28 | 59 | - | 5 | 1 | 859 |
| 881 | 378 | 8220 | 935 | - 125 | 69 | - | 11 | | 1138 |
| 893 | 488 | 8559 | 1155 | - 250 | 62 | - | 8 | | 1350 |
| 905 | 600 | 8904 | 1267 | - 317 | 37 | - | 2 | | 1423 |
| 917 | 709 | 9259 | 1331 | - 353 | 57 | - | 7 | | 1437 |
| 930 | 829 | 9391 | 1371 | - 372 | 54 | - | 6 | | 1429 |

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TWT 74 BLOW 6

4TH REDUCTION

CONFIG T9E23

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|-----|-------|------|------|------|-------|-------|------|-----|
| DEC | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 627 | -1045 | 1528 | 1402 | 4665 | 12202 | 19942 | 5171 | |
| 768 | -813 | 1528 | 1426 | 4729 | 12369 | 20216 | 5159 | |
| 786 | -653 | 1528 | 1429 | 4735 | 12384 | 20240 | 5155 | |
| 793 | -542 | 1528 | 1439 | 4771 | 12478 | 20393 | 5155 | |
| 813 | -404 | 1528 | 1438 | 4761 | 12453 | 20353 | 5150 | |
| 825 | -297 | 1528 | 1428 | 4728 | 12365 | 20208 | 5150 | |
| 837 | -189 | 1528 | 1431 | 4737 | 12389 | 20248 | 5150 | |
| 849 | -81 | 1528 | 1435 | 4744 | 12407 | 20278 | 5147 | |
| 861 | 30 | 1528 | 1432 | 4735 | 12383 | 20239 | 5145 | |
| 873 | 134 | 1528 | 1432 | 4731 | 12373 | 20222 | 5143 | |
| 886 | 253 | 1528 | 1430 | 4721 | 12348 | 20181 | 5142 | |
| 898 | 358 | 1528 | 1430 | 4719 | 12341 | 20169 | 5138 | |
| 911 | 475 | 1528 | 1428 | 4711 | 12321 | 20137 | 5136 | |
| 927 | 617 | 1528 | 1428 | 4706 | 12308 | 20115 | 5133 | |
| 939 | 722 | 1528 | 1425 | 4696 | 12282 | 20073 | 5133 | |
| 951 | 828 | 1528 | 1426 | 4695 | 12280 | 20070 | 5131 | |
| 964 | 939 | 1528 | 1424 | 4684 | 12251 | 20022 | 5128 | |

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Appendix "A"

TWT 74 BLOW 6

CONFIG T9E23

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|--------|-----|------|--------|-----|-----|-------|--------|--------|--------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 627 | - 1045 | | 9563 | - 3355 | 22 | 1 | 5748 | 10394 | - 2729 | 1928 |
| 768 | - 813 | | 9151 | - 2861 | 18 | 1 | 6022 | 11484 | - 2990 | 1723 |
| 786 | - 653 | | 8810 | - 2314 | 26 | | 6095 | 10368 | - 2994 | 1411 |
| 798 | - 542 | | 8558 | - 1913 | 32 | | 6232 | 10785 | - 3017 | 1192 |
| 813 | - 404 | | 8294 | - 1478 | 28 | - | 1 | 6398 | 9381 | - 3011 |
| 825 | - 297 | | 8120 | - 1126 | 29 | | 6594 | 10318 | - 2989 | - 743 |
| 837 | - 189 | | 7785 | - 818 | 30 | - | 1 | 7004 | 10396 | - 2991 |
| 849 | - 81 | | 7424 | - 429 | 30 | - | 1 | 7253 | 11640 | - 2953 |
| 861 | 30 | | 7291 | 234 | 8 | | 8425 | - 5820 | - 2888 | - 197 |
| 873 | 134 | | 7663 | 656 | 2 | 1 | 7488 | 3444 | - 2831 | - 491 |
| 886 | 253 | | 7998 | 999 | 9 | 1 | 6960 | 5017 | - 2816 | - 695 |
| 898 | 358 | | 8221 | 1334 | 9 | 1 | 6631 | 4634 | - 2857 | - 884 |
| 911 | 475 | | 8476 | 1725 | 11 | | 6468 | 4957 | - 2891 | - 1116 |
| 927 | 617 | | 8717 | 2209 | 16 | | 6275 | 5936 | - 2919 | - 1386 |
| 939 | 722 | | 8931 | 2598 | 13 | | 6157 | 5442 | - 2944 | - 1600 |
| 951 | 828 | | 9176 | 2912 | 13 | - | 1 | 6106 | 5760 | - 2967 |
| 964 | 939 | | 9456 | 3194 | 6 | - | 2 | 5987 | 4344 | - 2960 |
| | | | | | | | | | | - 1912 |

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SID-62-627
Appendix "A"

TWT 74 BLOW 6 4TH REDUCTION

CONFIG T9E23

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-------|--------|-------|------|------|-----|--------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 627 | - 1045 | 10013 | - 1564 | 1298 | - 31 | 22 | - 3 | - 1562 | |
| 768 | - 813 | 9464 | - 1539 | 1228 | - 22 | 18 | - 2 | - 1626 | |
| 786 | - 653 | 9016 | - 1298 | 1073 | - 35 | 25 | - 2 | - 1439 | |
| 798 | - 542 | 8701 | - 1095 | 969 | - 62 | 32 | - 3 | - 1259 | |
| 813 | - 404 | 8378 | - 889 | 847 | - 44 | 28 | - 2 | - 1061 | |
| 825 | - 297 | 8167 | - 703 | 747 | - 40 | 29 | - 2 | - 861 | |
| 837 | - 189 | 7808 | - 560 | 659 | - 41 | 30 | - 2 | - 717 | |
| 849 | - 81 | 7430 | - 324 | 503 | - 36 | 30 | - 2 | - 436 | |
| 861 | 30 | 7292 | 195 | 197 | 8 | 8 | | | 268 |
| 873 | 134 | 7677 | 476 | 52 | 35 | 1 | 1 | 620 | |
| 886 | 253 | 8034 | 645 | 30 | 50 | 9 | | | 803 |
| 898 | 358 | 8288 | 818 | - 105 | 59 | - 9 | 1 | 987 | |
| 911 | 475 | 8589 | 1017 | - 202 | 63 | - 11 | 1 | 1184 | |
| 927 | 617 | 8904 | 1259 | - 310 | 59 | - 16 | 2 | 1414 | |
| 939 | 722 | 9187 | 1454 | - 392 | 57 | - 13 | 2 | 1583 | |
| 951 | 828 | 9500 | 1560 | - 462 | 48 | - 12 | 3 | 1642 | |
| 964 | 939 | 9850 | 1608 | - 495 | 52 | - 6 | 3 | 1633 | |

TWT 74 BLOW 7 5TH REDUCTION

CONFIG T9E25C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TT0 |
|-------------|-------|------|------|------|-------|-------|------|-----|
| DEC | 2 | 2 | 3 | 2 | | 1 | 1 | 1 |
| 720 - 1053 | | 1528 | 1390 | 4634 | 12119 | 19807 | 5177 | |
| 778 - 1050 | | 1528 | 1392 | 4644 | 12145 | 19849 | 5181 | |
| 877 - 658 | | 1528 | 1420 | 4733 | 12380 | 20233 | 5177 | |
| 889 - 550 | | 1528 | 1428 | 4760 | 12450 | 20347 | 5177 | |
| 902 - 433 | | 1528 | 1424 | 4744 | 12407 | 20277 | 5174 | |
| 915 - 319 | | 1528 | 1427 | 4754 | 12433 | 20320 | 5176 | |
| 927 - 212 | | 1528 | 1424 | 4740 | 12397 | 20260 | 5172 | |
| 939 - 107 | | 1528 | 1426 | 4747 | 12416 | 20292 | 5172 | |
| 941 - 89 | | 1528 | 1428 | 4753 | 12430 | 20315 | 5171 | |
| 943 - 72 | | 1528 | 1426 | 4752 | 12428 | 20312 | 5176 | |
| 945 - 52 | | 1528 | 1430 | 4760 | 12449 | 20346 | 5172 | |
| 947 - 96 | | 1528 | 1430 | 4761 | 12452 | 20350 | 5172 | |
| 949 - 18 | | 1528 | 1431 | 4761 | 12451 | 20350 | 5171 | |
| 951 - 1 | | 1528 | 1430 | 4760 | 12449 | 20345 | 5171 | |
| 953 - 17 | | 1528 | 1428 | 4752 | 12427 | 20319 | 5171 | |
| 953 - 34 | | 1528 | 1425 | 4742 | 12419 | 20257 | 5169 | |
| 958 - 60 | | 1528 | 1425 | 4742 | 12401 | 20268 | 5169 | |
| 959 - 68 | | 1528 | 1424 | 4736 | 12387 | 20245 | 5169 | |
| 962 - 95 | | 1528 | 1426 | 4742 | 12402 | 20269 | 5169 | |
| 963 - 105 | | 1528 | 1425 | 4739 | 12395 | 20257 | 5169 | |
| 966 - 131 | | 1528 | 1426 | 4744 | 12408 | 20278 | 5169 | |
| 979 - 242 | | 1528 | 1425 | 4739 | 12396 | 20259 | 5169 | |
| 991 - 346 | | 1528 | 1426 | 4739 | 12394 | 20256 | 5165 | |
| 1004 - 462 | | 1528 | 1425 | 4734 | 12383 | 20237 | 5164 | |
| 1018 - 584 | | 1528 | 1424 | 4728 | 12365 | 20209 | 5160 | |
| 1030 - 688 | | 1528 | 1422 | 4716 | 12335 | 20160 | 5159 | |
| 1043 - 802 | | 1528 | 1429 | 4737 | 12390 | 20250 | 5157 | |
| 1057 - 924 | | 1528 | 1421 | 4711 | 12320 | 20195 | 5155 | |
| 1087 - 1055 | | 1528 | 1423 | 4709 | 12316 | 20129 | 5150 | |

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SID-62-627
Appendix "A"

TWT 74 BLOW 7

5TH REDUCTION

CONFIG T9E25C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|------|-------|-------|-------|----|-----|------|--------|--------|-------|-------|--|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 720 | -1053 | 10032 | -3699 | 79 | 7 | 6060 | -7507 | -2776 | 2241 | | |
| 778 | -1050 | 10114 | -3737 | 82 | 5 | 6071 | -12986 | -2871 | 2269 | | |
| 877 | -658 | 8828 | -2360 | 40 | 3 | 6999 | 47881 | -2932 | 1652 | | |
| 889 | -550 | 8500 | -1951 | 30 | 1 | 7303 | 29163 | -2950 | 1424 | | |
| 902 | -433 | 8195 | -1529 | 39 | - | 1 | 7695 | 14293 | -2939 | 1176 | |
| 915 | -319 | 7914 | -1175 | 43 | - | 1 | 8347 | 15024 | -2946 | 981 | |
| 927 | -212 | 7688 | -857 | 52 | - | 1 | 9099 | 15527 | -2937 | 780 | |
| 939 | -107 | 7219 | -521 | 38 | | 1 | 9992 | 15151 | -2899 | 520 | |
| 941 | -89 | 7102 | -437 | 32 | | 1 | 10071 | 28307 | -2879 | 440 | |
| 943 | -72 | 7001 | -398 | 26 | | 1 | 9660 | 34586 | -2882 | 385 | |
| 945 | -52 | 6903 | -271 | 1 | | 2 | 9842 | 2822 | -2864 | 266 | |
| 947 | -36 | 6823 | -168 | - | 3 | 1 | 9268 | 3994 | -2877 | 155 | |
| 949 | -18 | 6768 | - | 51 | 23 | 1 | 9134 | 50708 | -2803 | 47 | |
| 951 | -1 | 6776 | - | 72 | 19 | 1 | 10438 | -39319 | -2802 | -76 | |
| 953 | 17 | 6818 | 185 | 25 | 1 | 1 | 9820 | -18300 | -2785 | -182 | |
| 955 | 34 | 6892 | 285 | 10 | 1 | 1 | 10224 | -2831 | -2759 | -292 | |
| 958 | 60 | 7023 | 408 | 15 | 1 | 1 | 9979 | -2065 | -2739 | -407 | |
| 959 | 68 | 7085 | 450 | 1 | 1 | 1 | 9872 | 2959 | -2731 | -444 | |
| 962 | 95 | 7199 | 541 | - | 14 | 2 | 9835 | 5911 | -2751 | -532 | |
| 963 | 105 | 7234 | 595 | - | 11 | 2 | 9620 | 5100 | -2725 | -573 | |
| 966 | 131 | 7379 | 653 | - | 14 | 1 | 9783 | 6387 | -2748 | -639 | |
| 979 | 242 | 7790 | 976 | - | 9 | 2 | 8896 | 3617 | -2800 | -868 | |
| 991 | 346 | 8024 | 1294 | - | 8 | 2 | 8228 | 4438 | -2838 | -1064 | |
| 1004 | 462 | 8279 | 1682 | - | 11 | 2 | 7694 | 4609 | -2874 | -1294 | |
| 1018 | 584 | 8625 | 2151 | 4 | 2 | 7279 | 2697 | -2882 | -1566 | | |
| 1030 | 688 | 8966 | 2524 | - | 1 | 3 | 7055 | 3240 | -2921 | -1781 | |
| 1043 | 802 | 9306 | 2939 | - | 7 | 1 | 6854 | 4271 | -2935 | -2014 | |
| 1057 | 924 | 9803 | 3370 | - | 23 | 1 | 6550 | 5533 | -2917 | -2207 | |
| 1087 | 1055 | 10132 | 3773 | 37 | - | 1 | 6056 | -1081 | -2916 | -2285 | |

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Appendix "A"

TWT 74 BLOW 7

5TH REDUCTION

CONFIG T9E25C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|-------|------|-----|-----|-----|-----|----------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 720 | -1053 | 10539 | -1803 | 1523 | 74 | 79 | - | 8 | -1710 |
| 778 | -1050 | 10625 | -1830 | 1542 | 51 | 81 | - | 10 | -1729 |
| 877 | -658 | 9040 | -1333 | 1300 | - | 9 | 40 | - | 2 - 1475 |
| 889 | -550 | 8648 | -1126 | 1187 | - | 11 | 30 | - | 2 - 1302 |
| 902 | -433 | 8287 | -905 | 1058 | - | 35 | 39 | - | 4 - 1092 |
| 915 | -319 | 7957 | -734 | 961 | - | 36 | 43 | - | 3 - 921 |
| 927 | -212 | 7715 | -571 | 849 | - | 42 | 52 | - | 3 - 741 |
| 939 | -107 | 7228 | -386 | 675 | - | 32 | 38 | - | 1 - 594 |
| 941 | -89 | 7108 | -327 | 615 | - | 3 | 32 | - | - 459 |
| 943 | -72 | 7005 | -311 | 568 | - | 8 | 26 | - | - 444 |
| 945 | -52 | 6905 | -208 | 485 | 18 | - | 1 | 2 | - 301 |
| 947 | -36 | 6824 | -125 | 403 | - | 31 | - | 1 | - 183 |
| 949 | -18 | 6768 | -30 | 329 | - | 2 | 23 | - | - 45 |
| 951 | -1 | 6776 | -74 | 245 | - | 5 | 19 | - | 1 - 109 |
| 953 | 17 | 6818 | 166 | 176 | 11 | 25 | - | 1 | 243 |
| 955 | 34 | 6894 | 244 | 101 | 17 | 10 | - | 1 | 394 |
| 958 | 60 | 7027 | 334 | 30 | 29 | 15 | - | 1 | 476 |
| 959 | 68 | 7090 | 366 | 9 | 45 | - | 1 | 1 | 516 |
| 962 | 95 | 7207 | 421 | - | 46 | 50 | - | 14 | 2 585 |
| 963 | 105 | 7243 | 462 | - | 68 | 56 | - | 11 | 2 638 |
| 966 | 131 | 7392 | 485 | - | 109 | 44 | - | 14 | 1 656 |
| 979 | 242 | 7824 | 646 | - | 219 | 62 | - | 9 | 2 825 |
| 991 | 346 | 8087 | 807 | - | 306 | 65 | - | 9 | 1 998 |
| 1004 | 462 | 8388 | 1009 | - | 402 | 74 | - | 11 | 1 1209 |
| 1018 | 584 | 8799 | 1263 | - | 512 | 90 | - | 4 | 2 1436 |
| 1030 | 688 | 9204 | 1432 | - | 595 | 116 | - | 2 | 3 1556 |
| 1043 | 802 | 9625 | 1612 | - | 684 | 60 | - | 7 | 1 1675 |
| 1057 | 924 | 10217 | 1753 | - | 719 | 95 | - | 29 | 3 1716 |
| 1087 | 1055 | 10651 | 1855 | - | 656 | 88 | 37 | 6 | 1741 |

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Appendix "A"

TWT 74 BLOW 8 5TH REDUCTION

CONFIG T9E29C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|-----|------|------|------|-------|-------|-------|
| DEC= | 2 | 2 | 3 | 2 | | 1 | 1 | 1 |
| 742 | -1050 | | 1528 | 1368 | 4601 | 12033 | 19666 | 5210 |
| 887 | -641 | | 1528 | 1404 | 4713 | 12327 | 20147 | 5205 |
| 900 | -522 | | 1528 | 1406 | 4717 | 12336 | 20161 | 5201 |
| 913 | -405 | | 1528 | 1407 | 4717 | 12337 | 20164 | 5200 |
| 927 | -281 | | 1528 | 1406 | 4711 | 12322 | 20138 | 5198 |
| 939 | -175 | | 1528 | 1411 | 4729 | 12369 | 20216 | 5198 |
| 953 | -49 | | 1528 | 1417 | 4747 | 12415 | 20290 | 5196 |
| 966 | 65 | | 1528 | 1408 | 4717 | 12336 | 20161 | 5195 |
| 979 | 179 | | 1528 | 1417 | 4742 | 12403 | 20270 | 5193 |
| 992 | 292 | | 1528 | 1415 | 4734 | 12380 | 20234 | 5191 |
| 1004 | 398 | | 1528 | 1418 | 4743 | 12405 | 20273 | 5189 |
| 1018 | 519 | | 1528 | 1414 | 4727 | 12364 | 20206 | 5188 |
| 1031 | 632 | | 1528 | 1418 | 4738 | 12391 | 20252 | 5186 |
| 1044 | 743 | | 1528 | 1413 | 4719 | 12343 | 20173 | 5184 |
| 1056 | 846 | | 1528 | 1416 | 4728 | 12366 | 20211 | 5183 |
| | 1068 | 949 | | 1528 | 1414 | 4714 | 12328 | 20149 |
| | | | | | | | | 5177 |

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Appendix "A"

TWT 74 BLOW 8

5TH REDUCTION

CONFIG T9E29C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-------|-------|--------|--------|------|-----|------|----------|---------|------|------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 742 - | 1050 | 9657 - | 3604 - | 12 - | 3 | 6079 | 2167 - | 2657 | 2191 | |
| 887 - | 641 | 8490 - | 2124 - | 37 - | 1 | 6704 | 14866 - | 2995 | 1424 | |
| 900 - | 522 | 8210 - | 1678 - | 44 - | 1 | 6980 | 13030 - | 2962 | 1172 | |
| 913 - | 495 | 7935 - | 1215 - | 39 - | | 7315 | 14436 - | 2935 | 889 | |
| 927 - | 281 | 7772 - | 733 - | 43 - | 1 | 7941 | 26879 - | 2911 | 582 | |
| 939 - | 175 | 7524 - | 379 - | 31 - | | 8683 | 78965 - | 2876 | 329 | |
| 953 - | 49 | 7380 | 268 | 30 | 1 | 8604 | -10433 - | 2845 | - | 231 |
| 966 - | 65 | 7599 | 920 | 7 | 2 | 8267 | 2234 - | 2844 | - | 760 |
| 979 | 179 | 7837 | 1422 | 6 | 2 | 7861 | 2260 - | 2877 | - | 1118 |
| 992 | 292 | 8240 | 1902 | 15 | 1 | 7616 | 1222 - | 2899 | - | 1448 |
| 1004 | 398 | 8534 | 2231 | 2 | | 7324 | 3498 - | 2932 | - | 1634 |
| 1018 | 519 | 8997 | 2619 | 5 | - | 1 | 7058 | 4040 - | 2945 | - |
| 1031 | 632 | 9333 | 2942 | 14 | 3 | 6753 | 2073 - | 2984 | - | 1987 |
| 1044 | 743 | 9689 | 3187 | 6 | | 6511 | 3835 - | 3030 | - | 2075 |
| 1056 | 846 | 9905 | 3421 | 25 | - | 4 | 6222 | 10657 - | 3067 | - |
| 1068 | 949 | 10177 | 3644 | 26 | - | 5 | 5889 | 60694 - | 3097 | - |

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TWT 74 BLOW 8

CONFIG T9E29C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|-------|------|------|-----|-----|-----|-------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 742 | 1050 | 10152 | -1783 | 1486 | -126 | -13 | - | 1 | -1757 |
| 887 | 641 | 8674 | -1163 | 1132 | -31 | -37 | - | 3 | -1341 |
| 900 | 522 | 8329 | -925 | 1007 | -44 | 43 | - | 5 | -1110 |
| 913 | 405 | 8001 | -652 | 857 | -34 | 39 | - | 3 | -815 |
| 927 | 281 | 7799 | -351 | 694 | -18 | 43 | - | 3 | -450 |
| 939 | 175 | 7532 | -149 | 541 | -4 | 31 | - | 1 | -198 |
| 953 | 49 | 7377 | 332 | 178 | 22 | 30 | - | 450 | |
| 966 | 65 | 7609 | -834 | 137 | 73 | 7 | - | 2 | 1096 |
| 979 | 179 | 7878 | 1176 | -327 | 72 | 6 | - | 2 | 1493 |
| 992 | 292 | 8326 | 1479 | -490 | 77 | 15 | - | 2 | 1777 |
| 1004 | 398 | 8668 | 1633 | -559 | 61 | -2 | - | 2 | 1884 |
| 1018 | 519 | 9197 | 1794 | -631 | 52 | -5 | - | 2 | 1951 |
| 1031 | 632 | 9600 | 1896 | -654 | 131 | 14 | - | 4 | 1975 |
| 1044 | 743 | 10020 | 1909 | -650 | 80 | -6 | - | 1 | 1905 |
| 1056 | 846 | 10300 | 1928 | -620 | 33 | -24 | - | 7 | 1871 |
| 1068 | 949 | 10639 | 1916 | -556 | 5 | -25 | - | 9 | 1801 |

TWT 74 BLOW 9 4TH REDUCTION

CONFIG T9E32C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TT0 |
|------|--------|------|------|------|-------|-------|------|-----|
| DEC | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 731 | - 1048 | 1528 | 1378 | 4632 | 12114 | 19799 | 5210 | |
| 864 | - 815 | 1528 | 1396 | 4695 | 12278 | 20067 | 5210 | |
| 882 | - 650 | 1528 | 1401 | 4712 | 12323 | 20140 | 5210 | |
| 894 | - 543 | 1528 | 1408 | 4732 | 12379 | 20225 | 5206 | |
| 906 | - 436 | 1528 | 1407 | 4728 | 12366 | 20210 | 5206 | |
| 918 | - 331 | 1528 | 1408 | 4727 | 12364 | 20207 | 5205 | |
| 930 | - 223 | 1528 | 1410 | 4733 | 12380 | 20233 | 5203 | |
| 942 | - 121 | 1528 | 1410 | 4737 | 12390 | 20250 | 5206 | |
| 954 | - 16 | 1528 | 1415 | 4745 | 12411 | 20285 | 5200 | |
| 966 | - 89 | 1528 | 1414 | 4741 | 12398 | 20263 | 5198 | |
| 978 | 194 | 1528 | 1415 | 4743 | 12404 | 20273 | 5198 | |
| 991 | 303 | 1528 | 1416 | 4745 | 12410 | 20283 | 5196 | |
| 1003 | 409 | 1528 | 1416 | 4741 | 12398 | 20263 | 5193 | |
| 1015 | 513 | 1528 | 1411 | 4723 | 12353 | 20189 | 5192 | |
| 1029 | 637 | 1528 | 1415 | 4735 | 12384 | 20240 | 5191 | |
| 1042 | 745 | 1528 | 1410 | 4710 | 12319 | 20134 | 5186 | |
| 1054 | 850 | 1528 | 1410 | 4710 | 12319 | 20134 | 5186 | |
| 1066 | 953 | 1528 | 1412 | 4715 | 12331 | 20154 | 5183 | |

TWT 74 BLOW 9 4TH REDUCTION

CONFIG T9E32C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|-------|--------|------|-----|--------|---------|--------|--------|-----|
| DEC# | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 731 | - 1048 | 9401 | - 3175 | 47 | 8 | 6328 | - 1112 | - 2668 | 2009 | |
| 864 | - 815 | 8593 | - 2207 | 41 | 1 | 6043 | - 42768 | - 2829 | 1334 | |
| 882 | - 650 | 8175 | - 1363 | 42 | 1 | 5881 | 20171 | - 2742 | 801 | |
| 894 | - 543 | 8132 | - 841 | 43 | | 6181 | - 16085 | - 2749 | 520 | |
| 906 | - 436 | 8161 | - 428 | 39 | | 7058 | 18782 | - 2793 | 302 | |
| 918 | - 331 | 8224 | - 127 | 32 | 1 | 14176 | - 21919 | - 2836 | 180 | |
| 930 | - 223 | 8291 | 125 | 32 | | - 6264 | - 29621 | - 2903 | 78 | |
| 942 | - 121 | 8129 | 321 | 21 | 1 | 1438 | - 3698 | - 2952 | 46 | |
| 954 | - 16 | 7883 | 635 | 18 | 1 | 4874 | - 1013 | - 2969 | - 309 | |
| 966 | 89 | 7737 | 1065 | 3 | 1 | 6329 | - 2527 | - 2888 | 674 | |
| 978 | 194 | 7719 | 1550 | - 1 | 1 | 7242 | 3332 | - 2862 | - 1123 | |
| 991 | 303 | 8057 | 2093 | - 3 | 1 | 7616 | 3659 | - 2864 | - 1594 | |
| 1003 | 409 | 8484 | 2444 | - 17 | 1 | 7445 | 5484 | - 2939 | - 1820 | |
| 1015 | 513 | 8897 | 2757 | - 28 | 2 | 7189 | 6171 | - 2978 | - 1982 | |
| 1029 | 637 | 9346 | 3081 | 13 | - 1 | 6865 | 811 | - 3060 | - 2115 | |
| 1042 | 745 | 9771 | 3330 | - 24 | - 1 | 6645 | 8557 | - 3095 | - 2213 | |
| 1054 | 850 | 10075 | 3592 | 21 | | 6332 | 782 | - 3142 | - 2275 | |
| 1066 | 953 | 10361 | 3810 | 40 | 1 | 6015 | - 154 | - 3161 | - 2292 | |

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Appendix "A"

TWT 74 BLOW 9

4TH REDUCTION

CONFIG T9E32C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| DEC | BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|-------|------|-------|-------|--------|-------|-----|----|-----|------|--------|
| | | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 731 - | 1048 | | 9822 | - 1412 | 1427 | 110 | 47 | - | 1 | - 1438 |
| 864 - | 815 | | 8819 | - 967 | 1020 | 10 | 40 | - | 5 | - 1097 |
| 882 - | 650 | | 8276 | - 429 | 734 | 25 | 42 | - | 4 | - 518 |
| 894 - | 543 | | 8175 | - 68 | 614 | 33 | 43 | - | 4 | - 83 |
| 906 - | 436 | | 8170 | 194 | 527 | 25 | 39 | - | 3 | 237 |
| 918 - | 391 | | 8218 | 348 | 502 | 13 | 32 | - | 1 | 423 |
| 930 - | 223 | | 8280 | 447 | 482 | 10 | 32 | - | 1 | 540 |
| 942 - | 121 | | 8121 | 493 | 412 | 31 | 21 | - | 1 | 607 |
| 954 - | 16 | | 7881 | 657 | 236 | 44 | 18 | - | 1 | 833 |
| 966 - | 89 | | 7753 | 945 | | 49 | 3 | - | 1 | 1218 |
| 978 | 194 | | 7767 | 1288 | - 297 | 63 | - | 1 | 1 | 1658 |
| 991 | 303 | | 8156 | 1664 | - 583 | 52 | - | 3 | | 2040 |
| 1003 | 409 | | 8637 | 1833 | - 680 | 72 | - | 17 | | 2122 |
| 1015 | 519 | | 9108 | 1950 | - 726 | 91 | - | 28 | - | 1 |
| 1029 | 637 | | 9631 | 2024 | - 738 | 56 | 13 | | 1 | 2102 |
| 1042 | 745 | | 10120 | 2036 | - 739 | 43 | - | 23 | - | 4 |
| 1054 | 850 | | 10495 | 2064 | - 705 | 90 | 21 | 3 | 1967 | |
| 1066 | 953 | | 10849 | 2042 | - 642 | 122 | 39 | - | 8 | 1882 |

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Appendix "A"

TWT 74 BLOW 10

4TH REDUCTION

CONFIG T9E12C2

TUNNEL CONDITIONS

| DEC# | BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TT0 |
|------|------|-------|------|------|-------|-------|------|---|-----|
| | | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 873 | 1025 | 1528 | 1342 | 4620 | 12083 | 19747 | 5302 | | |
| 950 | 1239 | 1528 | 1363 | 4666 | 12203 | 19943 | 5280 | | |
| 963 | 1364 | 1528 | 1370 | 4687 | 12258 | 20034 | 5278 | | |
| 975 | 1477 | 1528 | 1372 | 4692 | 12271 | 20054 | 5275 | | |
| 987 | 1592 | 1528 | 1381 | 4715 | 12332 | 20155 | 5270 | | |
| 1000 | 1713 | 1528 | 1373 | 4687 | 12258 | 20034 | 5268 | | |
| 1012 | 1831 | 1528 | 1386 | 4726 | 12360 | 20200 | 5265 | | |
| 1024 | 1945 | 1528 | 1383 | 4711 | 12321 | 20136 | 5259 | | |
| 1036 | 2059 | 1528 | 1386 | 4720 | 12346 | 20178 | 5259 | | |
| 1048 | 2173 | 1528 | 1387 | 4718 | 12340 | 20168 | 5256 | | |
| 1059 | 2278 | 1528 | 1392 | 4733 | 12378 | 20229 | 5253 | | |
| 1072 | 2401 | 1528 | 1390 | 4723 | 12352 | 20188 | 5251 | | |
| 1087 | 2542 | 1528 | 1393 | 4731 | 12373 | 20222 | 5247 | | |
| 1099 | 2655 | 1528 | 1394 | 4730 | 12370 | 20217 | 5244 | | |
| 1114 | 2795 | 1528 | 1397 | 4733 | 12379 | 20232 | 5241 | | |
| 1125 | 2900 | 1528 | 1397 | 4731 | 12374 | 20223 | 5239 | | |
| 1138 | 3014 | 1528 | 1402 | 4745 | 12410 | 20283 | 5236 | | |

TWI 74 BLOW 10

4TH REDUCTION

CONFIG T9E12C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|------|----|-----|-----|-------|--------|--------|--------|
| DEC# | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 873 | 1025 | 9304 | 3114 | - | 20 | 12 | 5340 | 5717 | - 2989 | - 1663 |
| 950 | 1239 | 9291 | 3441 | - | 10 | 8 | 4827 | 4796 | - 3122 | - 1661 |
| 963 | 1364 | 9234 | 3572 | - | 30 | 11 | 4519 | 6776 | - 3081 | - 1614 |
| 973 | 1477 | 9268 | 3697 | - | 18 | 6 | 4225 | 6851 | - 3009 | - 1562 |
| 987 | 1592 | 9336 | 3840 | - | 9 | 4 | 3949 | 6145 | - 2934 | - 1516 |
| 1000 | 1713 | 9232 | 4013 | - | 2 | 1 | 3610 | 3770 | - 2875 | - 1449 |
| 1012 | 1831 | 9128 | 4244 | - | 4 | 3 | 3392 | 8737 | - 2875 | - 1440 |
| 1024 | 1945 | 9111 | 4496 | - | 19 | 4 | 3199 | 17776 | - 2833 | - 1438 |
| 1036 | 2059 | 9062 | 4706 | - | 24 | 5 | 2997 | 23098 | - 2836 | - 1411 |
| 1048 | 2179 | 9029 | 4988 | - | 25 | 6 | 2831 | 41659 | - 2845 | - 1412 |
| 1059 | 2278 | 8990 | 5233 | - | 17 | 5 | 2706 | 2906 | - 2860 | - 1416 |
| 1072 | 2401 | 8981 | 5587 | - | 19 | 6 | 2602 | 1737 | - 2909 | - 1454 |
| 1087 | 2542 | 8920 | 5944 | - | 18 | 6 | 2458 | 224 | - 2972 | - 1461 |
| 1099 | 2655 | 8887 | 6222 | - | 21 | 7 | 2359 | 1706 | - 2999 | - 1468 |
| 1114 | 2795 | 8830 | 6643 | - | 24 | 8 | 2262 | 2020 | - 3048 | - 1502 |
| 1125 | 2900 | 8778 | 6915 | - | 26 | 9 | 2178 | 2417 | - 3109 | - 1506 |
| 1138 | 3014 | 8728 | 7253 | 33 | - | 11 | 2099 | -14870 | - 3165 | - 1523 |

TWT 74 BLOW 10
CONFIG T9E12C2

4TH REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|------|-----|-----|-----|------|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 873 | 1025 | 9710 | 1409 | -314 | 72 | -21 | 8 | 1451 | |
| 950 | 1239 | 9812 | 1367 | -214 | 54 | -11 | 6 | 1394 | |
| 963 | 1364 | 9816 | 1293 | -130 | 79 | -31 | 3 | 1317 | |
| 975 | 1477 | 9904 | 1212 | -39 | 46 | -19 | 2 | 1224 | |
| 987 | 1592 | 10031 | 1131 | 53 | 30 | -10 | 1 | 1128 | |
| 1000 | 1713 | 10024 | 1110 | 169 | 20 | -2 | | 1107 | |
| 1012 | 1831 | 9999 | 1161 | 242 | 3 | 5 | - | 1 | 1161 |
| 1024 | 1945 | 10088 | 1205 | 319 | - | 13 | 19 | 2 | 1195 |
| 1035 | 2059 | 10138 | 1219 | 408 | -12 | 24 | 4 | 1202 | |
| 1048 | 2173 | 10294 | 1290 | 490 | 6 | 26 | 4 | 1261 | |
| 1059 | 2278 | 10315 | 1345 | 558 | 29 | 18 | 2 | 1304 | |
| 1072 | 2401 | 10477 | 1450 | 627 | 40 | 20 | 3 | 1384 | |
| 1087 | 2542 | 10608 | 1539 | 724 | 56 | 19 | 2 | 1451 | |
| 1099 | 2655 | 10731 | 1594 | 800 | 45 | 22 | 3 | 1486 | |
| 1114 | 2795 | 10914 | 1730 | 890 | 48 | 25 | 5 | 1585 | |
| 1125 | 2900 | 11029 | 1793 | 966 | 49 | 27 | 5 | 1625 | |
| 1138 | 3014 | 11190 | 1890 | 1049 | 19 | 35 | 7 | 1689 | |

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Appendix "A"

TWT 74 BLOW 11 3RD REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TT0 |
|------|-------|------|------|------|-------|-------|------|------|
| DECC | 2 | 2 | 3 | 2 | 4594 | 12014 | 1 | 1 |
| 723 | 998 | 1528 | 1346 | 4648 | 12157 | 19635 | 5268 | 5268 |
| 780 | 1297 | 1528 | 1363 | 4648 | 12157 | 19868 | 5265 | 5265 |
| 793 | 1362 | 1528 | 1356 | 4622 | 12088 | 19755 | 5261 | 5261 |
| 804 | 1465 | 1528 | 1366 | 4651 | 12165 | 19882 | 5260 | 5260 |
| 816 | 1578 | 1528 | 1365 | 4649 | 12159 | 19872 | 5260 | 5260 |
| 827 | 1683 | 1528 | 1369 | 4663 | 12196 | 19939 | 5260 | 5260 |
| 838 | 1785 | 1528 | 1369 | 4660 | 12187 | 19918 | 5258 | 5258 |
| 849 | 1890 | 1528 | 1375 | 4680 | 12239 | 20003 | 5258 | 5258 |
| 862 | 2015 | 1528 | 1379 | 4689 | 12264 | 20044 | 5254 | 5254 |
| 877 | 2157 | 1528 | 1376 | 4677 | 12293 | 19993 | 5251 | 5251 |
| 888 | 2261 | 1528 | 1380 | 4691 | 12270 | 20053 | 5251 | 5251 |
| 899 | 2367 | 1528 | 1388 | 4718 | 12341 | 20169 | 5251 | 5251 |
| 911 | 2480 | 1528 | 1383 | 4699 | 12290 | 20085 | 5249 | 5249 |
| 924 | 2598 | 1528 | 1388 | 4709 | 12315 | 20127 | 5244 | 5244 |
| 937 | 2718 | 1528 | 1392 | 4723 | 12352 | 20187 | 5244 | 5244 |
| 949 | 2830 | 1528 | 1390 | 4715 | 12332 | 20153 | 5244 | 5244 |
| 961 | 2943 | 1528 | 1395 | 4727 | 12362 | 20204 | 5241 | 5241 |
| 979 | 3069 | 1528 | 1398 | 4736 | 12385 | 20242 | 5237 | 5237 |

TWT 74 BLOW 11

3RD REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|------|------|----|-----|-----|-------|-------|--------|--------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 723 | 998 | 9387 | 3365 | - | 17 | 12 | 5648 | 5549 | - 2669 | - 1901 |
| 780 | 1237 | 9360 | 3734 | - | 20 | 11 | 5080 | 5745 | - 3080 | - 1897 |
| 793 | 1362 | 9492 | 3973 | - | 26 | 12 | 4743 | 6592 | - 3062 | - 1884 |
| 804 | 1465 | 9489 | 4089 | - | 14 | 8 | 4460 | 6519 | - 3022 | - 1824 |
| 816 | 1578 | 9474 | 4256 | - | 15 | 8 | 4170 | 6710 | - 2965 | - 1775 |
| 827 | 1683 | 9488 | 4425 | - | 9 | 7 | 3962 | 6150 | - 2927 | - 1753 |
| 838 | 1785 | 9537 | 4610 | - | 8 | 6 | 3769 | 5982 | - 2877 | - 1738 |
| 849 | 1890 | 9488 | 4775 | - | 6 | 3 | 3613 | 16128 | - 2895 | - 1725 |
| 862 | 2015 | 9428 | 5050 | - | 16 | 5 | 3362 | 16070 | - 2885 | - 1698 |
| 877 | 2157 | 9435 | 5394 | - | 3 | 3 | 3131 | 3035 | - 2893 | - 1689 |
| 888 | 2261 | 9441 | 5566 | 16 | - | 5 | 2964 | 5923 | - 2903 | - 1650 |
| 899 | 2367 | 9368 | 5931 | 73 | - | 3 | 2705 | -1457 | - 2964 | - 1604 |
| 911 | 2480 | 9381 | 6275 | 77 | - | 4 | 2550 | 5982 | - 3014 | - 1600 |
| 924 | 2598 | 9454 | 6437 | 36 | 4 | 7 | 2557 | 22863 | - 3032 | - 1646 |
| 937 | 2718 | 9470 | 6652 | 26 | - | 10 | 2472 | 9450 | - 3046 | - 1644 |
| 949 | 2830 | 9456 | 6993 | 28 | - | 11 | 2365 | 12501 | - 3088 | - 1654 |
| 961 | 2943 | 9377 | 7287 | 36 | - | 12 | 2247 | 18116 | - 3083 | - 1637 |
| 979 | 3069 | 9279 | 7647 | 36 | - | 12 | 2181 | 28986 | - 3136 | - 1668 |

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Appendix "A"

TWT 74 BLOW 11 3RD REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | DEC | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|-----|------|-------|-------|------|------|-----|-----|-----|------|------|
| | | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 723 | 998 | | 9829 | 1687 | -473 | 68 | -19 | 9 | 1716 | |
| 780 | 1237 | | 9943 | 1642 | -359 | 72 | -22 | 7 | 1652 | |
| 793 | 1362 | | 10161 | 1626 | -268 | 73 | -28 | 5 | 1601 | |
| 804 | 1465 | | 10215 | 1557 | -179 | 40 | -16 | 4 | 1524 | |
| 816 | 1578 | | 10275 | 1519 | -74 | 40 | -16 | 3 | 1478 | |
| 827 | 1683 | | 10369 | 1488 | -1 | 30 | -11 | 4 | 1436 | |
| 838 | 1785 | | 10492 | 1465 | 73 | 26 | -9 | 4 | 1396 | |
| 849 | 1890 | | 10523 | 1443 | 132 | 4 | -6 | 1 | 1372 | |
| 862 | 2015 | | 10591 | 1493 | 241 | -8 | -15 | - | 5 | 1410 |
| 877 | 2157 | | 10776 | 1539 | 354 | -26 | -1 | 3 | 1429 | |
| 888 | 2261 | | 10855 | 1509 | 444 | -54 | 16 | 2 | 1390 | |
| 899 | 2367 | | 10961 | 1671 | 597 | 50 | 68 | 27 | 1525 | |
| 911 | 2480 | | 11148 | 1761 | 706 | 85 | 71 | 28 | 1579 | |
| 924 | 2598 | | 11318 | 1646 | 712 | -18 | 36 | 9 | 1454 | |
| 937 | 2718 | | 11463 | 1591 | 779 | -40 | 28 | 3 | 1388 | |
| 949 | 2830 | | 11641 | 1674 | 872 | -29 | 30 | 4 | 1438 | |
| 961 | 2943 | | 11747 | 1740 | 973 | -24 | 38 | 8 | 1481 | |
| 979 | 3069 | | 11883 | 1839 | 1047 | -14 | 37 | 8 | 1548 | |

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Appendix "A"

TWT 74 BLOW 12 2ND REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TTO |
|-----|-------|-----|------|------|------|-------|-------|-------|
| 747 | 976 | 2 | 3 | 1528 | 1364 | 4638 | 12132 | 19827 |
| 802 | 1228 | | 1528 | 1370 | 4657 | 12180 | 19906 | 5251 |
| 816 | 1362 | | 1528 | 1364 | 4634 | 12120 | 19809 | 5249 |
| 827 | 1463 | | 1528 | 1371 | 4659 | 12185 | 19914 | 5249 |
| 839 | 1579 | | 1528 | 1363 | 4632 | 12114 | 19798 | 5249 |
| 850 | 1678 | | 1528 | 1381 | 4692 | 12270 | 20054 | 5249 |
| 862 | 1791 | | 1528 | 1377 | 4672 | 12220 | 19972 | 5244 |
| 874 | 1905 | | 1528 | 1379 | 4680 | 12239 | 20004 | 5244 |
| 886 | 2019 | | 1528 | 1383 | 4693 | 12275 | 20062 | 5244 |
| 897 | 2121 | | 1528 | 1382 | 4690 | 12266 | 20046 | 5244 |
| 910 | 2241 | | 1528 | 1389 | 4711 | 12321 | 20136 | 5243 |
| 922 | 2351 | | 1528 | 1390 | 4709 | 12315 | 20127 | 5239 |
| 934 | 2464 | | 1528 | 1396 | 4731 | 12373 | 20221 | 5239 |
| 946 | 2575 | | 1528 | 1392 | 4715 | 12331 | 20153 | 5237 |
| 959 | 2695 | | 1528 | 1399 | 4738 | 12391 | 20252 | 5237 |
| 972 | 2813 | | 1528 | 1394 | 4718 | 12338 | 20165 | 5236 |
| 984 | 2924 | | 1528 | 1397 | 4724 | 12356 | 20194 | 5232 |
| 996 | 3034 | | 1528 | 1396 | 4723 | 12352 | 20188 | 5232 |

TWT 74 BLOW 12

2ND REDUCTION

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) /Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|-------|------|----|-----|-----|-------|--------|--------|-------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 747 | 976 | 9707 | 3555 | - | 62 | 12 | 6101 | 19137 | -2471 | -2169 |
| 802 | 1228 | 10093 | 4155 | - | 104 | 5 | 5451 | -11219 | -2966 | -2265 |
| 816 | 1362 | 10237 | 4396 | - | 76 | 4 | 5144 | -5574 | -2907 | -2262 |
| 827 | 1463 | 10424 | 4632 | - | 73 | 2 | 4888 | -4482 | -2920 | -2264 |
| 839 | 1579 | 10488 | 4854 | - | 76 | 5 | 4664 | -9323 | -2893 | -2264 |
| 850 | 1678 | 10476 | 5006 | - | 89 | 5 | 4420 | -15087 | -2911 | -2213 |
| 862 | 1791 | 10546 | 5272 | - | 101 | 4 | 4185 | -23611 | -2898 | -2207 |
| 874 | 1905 | 10450 | 5450 | - | 131 | 3 | 3926 | -19954 | -2875 | -2139 |
| 886 | 2019 | 10502 | 5683 | - | 163 | - | 3730 | -16877 | -2904 | -2120 |
| 897 | 2121 | 10525 | 5897 | - | 160 | - | 3584 | -13231 | -2862 | -2113 |
| 910 | 2241 | 10593 | 6216 | - | 148 | - | 3481 | -13259 | -2908 | -2163 |
| 922 | 2351 | 10626 | 6459 | - | 122 | - | 3368 | -11605 | -2966 | -2176 |
| 934 | 2464 | 10693 | 6742 | - | 111 | - | 3343 | -25380 | -2992 | -2254 |
| 946 | 2575 | 10657 | 6997 | - | 30 | - | 3191 | -3996 | -3021 | -2233 |
| 959 | 2695 | 10654 | 7320 | - | 16 | - | 3061 | -9331 | -3067 | -2241 |
| 972 | 2813 | 10632 | 7557 | - | 13 | - | 4 | 2898 | -34661 | -3046 |
| 984 | 2924 | 10622 | 7871 | - | 20 | - | 6 | 2747 | 8805 | -3054 |
| 996 | 3034 | 10523 | 8131 | - | 21 | - | 6 | 2614 | 7961 | -3057 |

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TWT 74 BLOW 12 2ND REDUCTION

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| DEC | BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|-----|------|-------|------|-----|-----|-----|----|-----|------|------|
| | | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 747 | 976 | 10169 | 1858 | - | 670 | 39 | - | 64 | 1 | 1828 |
| 802 | 1228 | 10746 | 1913 | - | 568 | 73 | - | 102 | - | 1780 |
| 816 | 1362 | 10984 | 1862 | - | 485 | 88 | - | 75 | - | 14 |
| 827 | 1463 | 11256 | 1850 | - | 408 | 98 | - | 71 | - | 1644 |
| 839 | 1579 | 11413 | 1817 | - | 338 | 62 | - | 74 | - | 16 |
| 850 | 1678 | 11476 | 1769 | - | 242 | 49 | - | 87 | - | 21 |
| 862 | 1791 | 11656 | 1774 | - | 152 | 38 | - | 97 | - | 27 |
| 874 | 1905 | 11657 | 1740 | - | 36 | 57 | - | 125 | - | 40 |
| 886 | 2019 | 11818 | 1709 | 57 | - | 82 | - | 152 | - | 57 |
| 897 | 2121 | 11946 | 1690 | 129 | - | 98 | - | 149 | - | 58 |
| 910 | 2241 | 12162 | 1708 | 178 | - | 91 | - | 136 | - | 58 |
| 922 | 2351 | 12321 | 1684 | 240 | - | 83 | - | 111 | - | 49 |
| 934 | 2464 | 12530 | 1670 | 250 | - | 39 | - | 99 | - | 50 |
| 946 | 2575 | 12638 | 1673 | 346 | 43 | 27 | - | 13 | - | 1324 |
| 959 | 2695 | 12815 | 1697 | 436 | 13 | 15 | 5 | 5 | - | 1325 |
| 972 | 2813 | 12939 | 1651 | 357 | 1 | 13 | 3 | 13 | - | 1276 |
| 984 | 2924 | 13113 | 1680 | 680 | - | 35 | 21 | 5 | 1281 | |
| 996 | 3034 | 13189 | 1702 | 790 | - | 42 | 21 | 5 | 1290 | |

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Appendix "A"

TWT 74 BLOW 13

2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TT0 |
|------|-------|------|------|------|-------|-------|------|-----|
| DEC | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 842 | 973 | 1528 | 1369 | 4640 | 12136 | 19835 | 5240 | |
| 889 | 1199 | 1528 | 1370 | 4642 | 12142 | 19844 | 5240 | |
| 907 | 1365 | 1528 | 1377 | 4666 | 12202 | 19943 | 5240 | |
| 919 | 1476 | 1528 | 1364 | 4621 | 12087 | 19754 | 5240 | |
| 932 | 1595 | 1528 | 1383 | 4686 | 12255 | 20029 | 5240 | |
| 944 | 1706 | 1528 | 1373 | 4654 | 12171 | 19892 | 5240 | |
| 957 | 1827 | 1528 | 1387 | 4699 | 12290 | 20086 | 5240 | |
| 968 | 1930 | 1528 | 1378 | 4671 | 12217 | 19967 | 5240 | |
| 980 | 2041 | 1528 | 1393 | 4718 | 12339 | 20166 | 5238 | |
| 992 | 2150 | 1528 | 1384 | 4686 | 12255 | 20029 | 5237 | |
| 1005 | 2269 | 1528 | 1393 | 4715 | 12332 | 20154 | 5237 | |
| 1017 | 2377 | 1528 | 1397 | 4733 | 12378 | 20230 | 5240 | |
| 1029 | 2484 | 1528 | 1392 | 4713 | 12327 | 20146 | 5237 | |
| 1041 | 2595 | 1528 | 1401 | 4744 | 12408 | 20279 | 5237 | |
| 1054 | 2713 | 1528 | 1397 | 4733 | 12378 | 20230 | 5240 | |
| 1065 | 2813 | 1528 | 1396 | 4727 | 12364 | 20208 | 5237 | |
| 1077 | 2920 | 1528 | 1395 | 4726 | 12361 | 20203 | 5240 | |
| 1094 | 3045 | 1528 | 1398 | 4734 | 12381 | 20235 | 5237 | |

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~~SOME INFORMATION CONTAINED~~

TWT 74 BLOW 13

2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|-------|------|-----|-----|------|---------|---------|--------|--------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 842 | 973 | 9903 | 3722 | - | 35 | 7 | 5614 | - 6638 | - 2892 | - 2090 |
| 889 | 1199 | 9997 | 4044 | - | 30 | 8 | 5144 | - | 3033 | - 2080 |
| 907 | 1365 | 10165 | 4262 | - | 12 | 8 | 4711 | 12541 | - 3045 | - 2007 |
| 919 | 1476 | 10175 | 4446 | - | 12 | 13 | 4393 | - 3838 | - 2991 | - 1953 |
| 932 | 1595 | 9927 | 4564 | 30 | 9 | 4035 | 918 | - 2971 | - 1842 | |
| 944 | 1706 | 10194 | 4878 | 43 | 9 | 3804 | - 216 | - 2910 | - 1856 | |
| 957 | 1827 | 9844 | 4993 | 64 | 6 | 3618 | - 2783 | - 2909 | - 1806 | |
| 968 | 1930 | 10165 | 5387 | 97 | 7 | 3463 | - 4132 | - 2874 | - 1866 | |
| 980 | 2041 | 10071 | 5588 | 140 | 4 | 3329 | - 7717 | - 2906 | - 1860 | |
| 992 | 2150 | 9540 | 5691 | 150 | 4 | 3164 | - 8252 | - 2912 | - 1801 | |
| 1005 | 2269 | 9811 | 6045 | 152 | 1 | 3050 | - 10893 | - 2955 | - 1844 | |
| 1017 | 2377 | 10285 | 6456 | 141 | | 3009 | - 12410 | - 3010 | - 1943 | |
| 1029 | 2484 | 10193 | 6712 | 105 | | 1 | 2939 | - 10087 | - 3017 | - 1972 |
| 1041 | 2595 | 10110 | 6957 | 64 | | 2 | 2845 | - 11716 | - 3080 | - 1979 |
| 1054 | 2713 | 10028 | 7281 | 35 | | 6 | 2756 | - 8077 | - 3116 | - 2007 |
| 1065 | 2813 | 10180 | 7608 | 33 | | 8 | 2627 | - 49859 | - 3105 | - 1999 |
| 1077 | 2920 | 9978 | 7852 | 42 | | 9 | 2503 | - 6853 | - 3147 | - 1966 |
| 1094 | 3045 | 9625 | 8149 | 51 | | 8 | 2399 | - 4857 | - 3128 | - 1955 |

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TWT 74 BLOW 13

2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| DEC | BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|------|-------|-------|------|------|-----|-----|-----|------|-----|
| | | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 842 | 973 | | 10390 | 1995 | -531 | -36 | -35 | 1 | 1920 | |
| 889 | 1199 | | 10619 | 1879 | -421 | - | -31 | 2 | 1769 | |
| 907 | 1365 | | 10884 | 1741 | -275 | 12 | -13 | 5 | 1600 | |
| 919 | 1476 | | 10972 | 1707 | -164 | 150 | -15 | 9 | 1556 | |
| 932 | 1595 | | 10799 | 1660 | -28 | 144 | 27 | 17 | 1537 | |
| 944 | 1706 | | 11177 | 1673 | 64 | 133 | 38 | 21 | 1497 | |
| 957 | 1827 | | 10913 | 1656 | 133 | 110 | 59 | 26 | 1517 | |
| 968 | 1930 | | 11374 | 1724 | 206 | 135 | 89 | 39 | 1516 | |
| 980 | 2041 | | 11388 | 1725 | 268 | 131 | 130 | 53 | 1515 | |
| 992 | 2150 | | 10962 | 1799 | 396 | 134 | 138 | 59 | 1641 | |
| 1005 | 2269 | | 11383 | 1793 | 411 | 109 | 140 | 60 | 1575 | |
| 1017 | 2377 | | 12015 | 1763 | 457 | 91 | 129 | 56 | 1468 | |
| 1029 | 2484 | | 12070 | 1809 | 501 | 80 | 95 | 45 | 1499 | |
| 1041 | 2595 | | 12135 | 1831 | 564 | 44 | 59 | 26 | 1509 | |
| 1054 | 2713 | | 12245 | 1907 | 630 | 32 | 34 | 10 | 1558 | |
| 1065 | 2813 | | 12565 | 1910 | 744 | 8 | 33 | 9 | 1520 | |
| 1077 | 2920 | | 12541 | 1986 | 842 | 43 | 42 | 13 | 1584 | |
| 1094 | 3045 | | 12427 | 2148 | 926 | 65 | 48 | 19 | 1728 | |

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Appendix "A"

TWT 74 BLOW 14

2ND REDUCTION

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TTO |
|------|-------|------|------|------|-------|-------|------|-----|
| DEC | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 |
| 751 | 988 | 1528 | 1452 | 4616 | 12073 | 19732 | 5000 | |
| 814 | 1212 | 1528 | 1466 | 4660 | 12187 | 19918 | 5000 | |
| 830 | 1363 | 1528 | 1466 | 4659 | 12186 | 19915 | 5000 | |
| 841 | 1468 | 1528 | 1478 | 4698 | 12287 | 20080 | 5000 | |
| 853 | 1581 | 1528 | 1475 | 4691 | 12268 | 20050 | 5000 | |
| 864 | 1683 | 1528 | 1474 | 4687 | 12260 | 20036 | 5000 | |
| 876 | 1794 | 1528 | 1481 | 4707 | 12310 | 20119 | 5000 | |
| 887 | 1899 | 1528 | 1476 | 4693 | 12273 | 20059 | 5000 | |
| 900 | 2019 | 1528 | 1481 | 4708 | 12314 | 20126 | 5000 | |
| 913 | 2141 | 1528 | 1481 | 4706 | 12307 | 20114 | 4998 | |
| 925 | 2251 | 1528 | 1488 | 4729 | 12369 | 20216 | 4998 | |
| 938 | 2369 | 1528 | 1486 | 4724 | 12355 | 20193 | 5000 | |
| 950 | 2479 | 1528 | 1489 | 4733 | 12379 | 20231 | 5000 | |
| 961 | 2582 | 1528 | 1490 | 4733 | 12379 | 20231 | 4997 | |
| 974 | 2701 | 1528 | 1496 | 4750 | 12423 | 20304 | 4997 | |
| 987 | 2818 | 1528 | 1486 | 4723 | 12353 | 20188 | 5000 | |
| 999 | 2926 | 1528 | 1493 | 4745 | 12410 | 20283 | 5000 | |
| 1019 | 3055 | 1528 | 1487 | 4726 | 12360 | 20201 | 4998 | |

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Appendix "A"

TWT 74 BLOW 14 2ND REDUCTION

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | DEC | ALPHA | YAW | CA | CN | CNB | CLB | -XCPY | PBC | CMA |
|------|------|-------|------|-----|------|------|---------|--------|--------|--------|
| | | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 751 | 988 | 10081 | 3924 | - | 85 | 10 | 5691 | 97388 | - 2785 | - 2233 |
| 814 | 1212 | 10409 | 4205 | 48 | 15 | 5062 | 704 | - 2959 | - 2128 | |
| 830 | 1363 | 10564 | 4392 | 57 | 13 | 4558 | 430 | - 2943 | - 2002 | |
| 841 | 1468 | 10583 | 4545 | 66 | 15 | 4245 | 4 | - 2941 | - 1929 | |
| 853 | 1581 | 10596 | 4787 | 100 | 9 | 3984 | - 2573 | - 2889 | - 1907 | |
| 864 | 1683 | 10635 | 5070 | 110 | 10 | 3808 | - 3791 | - 2836 | - 1931 | |
| 876 | 1794 | 10381 | 5245 | 184 | 9 | 3689 | - 6151 | - 2869 | - 1935 | |
| 887 | 1899 | 10595 | 5611 | 185 | 6 | 3585 | - 7312 | - 2859 | - 1976 | |
| 900 | 2019 | 10231 | 5614 | 187 | 6 | 3426 | - 7705 | - 2874 | - 1923 | |
| 913 | 2141 | 10585 | 6050 | 180 | 5 | 3293 | - 6996 | - 2915 | - 1992 | |
| 925 | 2251 | 10597 | 6348 | 36 | - 4 | 3198 | - 3174 | - 2970 | - 2030 | |
| 938 | 2369 | 10608 | 6641 | - | 82 | 3101 | - 11057 | - 2998 | - 2059 | |
| 950 | 2479 | 10752 | 6901 | - | 81 | - 10 | 3013 | - 4416 | - 3047 | - 2079 |
| 961 | 2582 | 10754 | 7134 | 56 | - 7 | 2879 | - | 3059 | - 2054 | |
| 974 | 2701 | 10648 | 7400 | 34 | - 10 | 2740 | 13363 | - 3089 | - 2028 | |
| 987 | 2818 | 10878 | 7772 | - | 34 | - 9 | 2681 | 11723 | - 3092 | - 2084 |
| 999 | 2926 | 10748 | 7997 | 38 | - 10 | 2565 | 27319 | - 3152 | - 2051 | |
| 1019 | 3055 | 10599 | 8348 | 48 | - 14 | 2421 | 16928 | - 3156 | - 2021 | |

TWT 74 BLOW 14

2ND REDUCTION

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|-----|-----|-----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 751 | 988 | 10605 | 2136 | - | 606 | 9 | - | 85 | - |
| 814 | 1212 | 11060 | 1925 | - | 402 | 208 | - | 44 | 25 |
| 830 | 1363 | 11301 | 1780 | - | 212 | 220 | - | 52 | 26 |
| 841 | 1468 | 11389 | 1713 | - | 93 | 218 | - | 60 | 31 |
| 853 | 1581 | 11499 | 1719 | 3 | 179 | 94 | - | 36 | 1504 |
| 864 | 1683 | 11648 | 1774 | - | 67 | 162 | - | 102 | 42 |
| 876 | 1794 | 11491 | 1793 | 104 | 200 | 200 | - | 172 | 65 |
| 887 | 1899 | 11811 | 1764 | 153 | 180 | 180 | - | 173 | 66 |
| 900 | 2019 | 11540 | 1738 | 220 | 175 | 175 | - | 174 | 70 |
| 913 | 2141 | 12063 | 1768 | 298 | 180 | 180 | - | 166 | 70 |
| 925 | 2251 | 12220 | 1809 | 351 | 59 | 59 | - | 35 | 10 |
| 938 | 2369 | 12383 | 1818 | 410 | 58 | 58 | - | 75 | 33 |
| 950 | 2479 | 12655 | 1757 | 475 | - | 109 | - | 69 | - |
| 961 | 2582 | 12787 | 1739 | 571 | - | 3 | - | 53 | 18 |
| 974 | 2701 | 12847 | 1756 | 673 | - | 33 | - | 35 | 7 |
| 987 | 2818 | 13259 | 1714 | 739 | - | 39 | - | 35 | 1367 |
| 999 | 2926 | 13285 | 1722 | 834 | - | 16 | - | 38 | 10 |
| 1019 | 3055 | 13371 | 1801 | 963 | - | 34 | - | 48 | 12 |
| | | | | | | | | | 1347 |

TWT 74 BLOW 15 2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| | BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|-----|-------|-----|------|------|------|-------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | | | 1 | 1 | 1 |
| 628 | - | 1058 | | 1528 | 1462 | 4646 | 12152 | 19861 | 5000 |
| 782 | - | 833 | | 1528 | 1479 | 4702 | 12299 | 20100 | 5000 |
| 803 | - | 634 | | 1528 | 1485 | 4721 | 12348 | 20181 | 5000 |
| 814 | - | 532 | | 1528 | 1487 | 4728 | 12365 | 20208 | 5000 |
| 827 | - | 410 | | 1528 | 1491 | 4739 | 12395 | 20257 | 5000 |
| 838 | - | 310 | | 1528 | 1489 | 4734 | 12382 | 20237 | 5000 |
| 851 | - | 188 | | 1528 | 1492 | 4742 | 12402 | 20269 | 5000 |
| 863 | - | 80 | | 1528 | 1492 | 4743 | 12406 | 20276 | 5000 |
| 875 | 30 | | | 1528 | 1491 | 4741 | 12399 | 20264 | 5000 |
| 887 | - | 142 | | 1528 | 1494 | 4745 | 12410 | 20283 | 4997 |
| 900 | 260 | | | 1528 | 1487 | 4726 | 12361 | 20202 | 5000 |
| 914 | 386 | | | 1528 | 1483 | 4715 | 12331 | 20153 | 5000 |
| 927 | 501 | | | 1528 | 1483 | 4716 | 12334 | 20158 | 5000 |
| 940 | 620 | | | 1528 | 1478 | 4693 | 12273 | 20059 | 4997 |
| 954 | 746 | | | 1528 | 1481 | 4707 | 12310 | 20118 | 4998 |
| 967 | 862 | | | 1528 | 1475 | 4688 | 12262 | 20041 | 5000 |
| 983 | 983 | | | 1528 | 1472 | 4678 | 12235 | 19997 | 5000 |

TWT 74 BLOW 15

2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|-------|--------|------|-----|------|---------|--------|--------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 628 | - 1058 | 9357 | - 3601 | - 23 | - 2 | 6104 | 1170 | - 3082 | 2198 | |
| 782 | - 833 | 9080 | - 2904 | 35 | 1 | 6473 | 11706 | - 3103 | 1880 | |
| 803 | - 634 | 8499 | - 2073 | 28 | 1 | 6762 | 22073 | - 3091 | 1402 | |
| 814 | - 532 | 8231 | - 1675 | 29 | 1 | 6939 | 9519 | - 3040 | 1162 | |
| 827 | - 410 | 7992 | - 1232 | 39 | - 1 | 7282 | 12738 | - 3001 | 897 | |
| 838 | - 310 | 7775 | - 817 | 37 | | 7855 | 15284 | - 2963 | 642 | |
| 851 | - 188 | 7591 | - 411 | 28 | - 1 | 8518 | 23356 | - 2929 | 350 | |
| 863 | - 80 | 7333 | 155 | 36 | | 8435 | - 66917 | - 2906 | - 131 | |
| 875 | 30 | 7485 | 758 | 4 | 2 | 8247 | 2413 | - 2916 | - 625 | |
| 887 | 142 | 7866 | 1291 | 12 | 1 | 7984 | 735 | - 2942 | - 1091 | |
| 900 | 260 | 8162 | 1797 | - 8 | 1 | 7661 | 4434 | - 2949 | - 1377 | |
| 914 | 386 | 8547 | 2246 | - 22 | 1 | 7322 | 5811 | - 2973 | - 1644 | |
| 927 | 501 | 8927 | 2581 | - 28 | - 1 | 7081 | 9391 | - 2982 | - 1828 | |
| 940 | 620 | 9213 | 2891 | - 21 | - 1 | 6822 | 7578 | - 3049 | - 1972 | |
| 954 | 746 | 9536 | 3207 | - 8 | | 6518 | 4109 | - 3145 | - 2090 | |
| 967 | 862 | 9658 | 3474 | - 6 | 5 | 6156 | 3467 | - 3165 | - 2139 | |
| 983 | 983 | 10079 | 3721 | - 4 | 6 | 5795 | 3350 | - 3178 | - 2156 | |

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Appendix "A"

TWT 74 BLOW 15

2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|-------|--------|-------|-------|------|-----|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 628 | - 1058 | | 9860 | - 1821 | 1481 | - 119 | - 23 | 3 | - 1847 |
| 782 | - 833 | | 9405 | - 1558 | 1369 | - 41 | - 34 | 4 | - 1657 |
| 803 | - 634 | | 8676 | - 1122 | 1126 | - 15 | - 28 | 2 | - 1294 |
| 814 | - 532 | | 8351 | - 905 | 999 | - 45 | - 29 | 3 | - 1084 |
| 827 | - 410 | | 8060 | - 658 | 863 | - 40 | - 38 | 3 | - 816 |
| 838 | - 310 | | 7808 | - 395 | 728 | - 30 | - 37 | 2 | - 505 |
| 851 | - 188 | | 7600 | - 161 | 555 | - 14 | - 28 | 2 | - 212 |
| 863 | - 80 | | 7330 | - 257 | 241 | - 5 | - 36 | 5 | 351 |
| 875 | 30 | | 7489 | 718 | - 58 | 55 | - 4 | 2 | 959 |
| 887 | 142 | | 7895 | 1096 | - 280 | 49 | - 12 | 2 | 1388 |
| 900 | 260 | | 8235 | 1426 | - 454 | 63 | - 8 | 1 | 1731 |
| 914 | 386 | | 8679 | 1666 | - 564 | 83 | - 22 | | 1920 |
| 927 | 501 | | 9118 | 1791 | - 626 | 44 | - 28 | 4 | 1965 |
| 940 | 620 | | 9471 | 1880 | - 661 | 48 | - 21 | 3 | 1985 |
| 954 | 746 | | 9871 | 1942 | - 665 | 86 | - 8 | 1 | 1967 |
| 967 | 862 | | 10069 | 1988 | - 625 | 182 | - 7 | 4 | 1974 |
| 983 | 983 | | 10566 | 1945 | - 546 | 194 | - 5 | 5 | 1841 |

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TWT 74 BLOW 16 2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| DEC | BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|-----|----|-------|-----|------|------|------|-------|-------|------|
| | | 2 | 2 | 3 | 2 | | 1 | 1 | 1 |
| 671 | - | 1047 | | 883 | 1397 | 4845 | 29183 | 15919 | 5206 |
| 791 | - | 827 | | 884 | 1404 | 4838 | 29101 | 15918 | 5184 |
| 810 | - | 649 | | 890 | 1411 | 4844 | 28959 | 16046 | 5179 |
| 821 | - | 549 | | 890 | 1405 | 4822 | 28804 | 15987 | 5177 |
| 834 | - | 429 | | 894 | 1407 | 4816 | 28646 | 16041 | 5175 |
| 846 | - | 319 | | 899 | 1412 | 4822 | 28544 | 16148 | 5174 |
| 858 | - | 206 | | 900 | 1416 | 4826 | 28544 | 16175 | 5168 |
| 870 | - | 95 | | 896 | 1406 | 4801 | 28515 | 16016 | 5168 |
| 883 | | 25 | | 895 | 1405 | 4794 | 28487 | 15988 | 5163 |
| 895 | | 133 | | 893 | 1402 | 4785 | 28503 | 15915 | 5162 |
| 906 | | 232 | | 892 | 1396 | 4766 | 28422 | 15831 | 5160 |
| 918 | | 337 | | 887 | 1386 | 4736 | 28402 | 15638 | 5156 |
| 930 | | 446 | | 875 | 1351 | 4637 | 28153 | 15101 | 5151 |
| 942 | | 550 | | 870 | 1318 | 4533 | 27672 | 14665 | 5148 |
| 955 | | 665 | | 864 | 1279 | 4404 | 27069 | 14132 | 5141 |
| 967 | | 769 | | 862 | 1246 | 4289 | 26408 | 13734 | 5138 |
| 980 | | 881 | | 857 | 1206 | 4158 | 25752 | 13226 | 5132 |

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Appendix "A"

TWT 74 BLOW 16

CONFIG E29T9C2

2ND REDUCTION

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | PBC | CMA | 4 |
|------|--------|------|--------|----|-----|-------|-------|--------|--------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 671 | - 1047 | 7712 | - 3966 | 53 | 1 | 6517 | 10578 | - 3902 | 2585 | |
| 791 | - 827 | 7380 | - 3343 | 48 | 1 | 6858 | 10207 | - 3851 | 2293 | |
| 810 | - 649 | 6747 | - 2615 | 66 | - | 3 | 6972 | 8128 | - 3613 | 1823 |
| 821 | - 549 | 6246 | - 2080 | 67 | - | 4 | 6949 | 9608 | - 3292 | 1446 |
| 834 | - 429 | 5554 | - 1346 | 38 | - | 1 | 6461 | 11290 | - 2911 | 869 |
| 846 | - 319 | 5354 | - 417 | 6 | 2 | 3650 | 372 | - 2843 | 152 | |
| 858 | - 206 | 5659 | 370 | 20 | | 11627 | 32909 | - 2819 | - 430 | |
| 870 | - 95 | 6058 | 1009 | - | 5 | 2 | 8585 | 4147 | - 3072 | - 866 |
| 883 | 25 | 6522 | 1557 | - | 1 | 3 | 7978 | 3286 | - 3282 | - 1242 |
| 895 | 133 | 6845 | 1956 | - | 13 | 2 | 7880 | 4338 | - 3491 | - 1541 |
| 906 | 232 | 7133 | 2389 | - | 5 | 1 | 7555 | 3840 | - 3628 | - 1805 |
| 918 | 337 | 7422 | 2747 | - | 1 | 1 | 7313 | 3220 | - 3660 | - 2009 |
| 930 | 446 | 7839 | 3051 | - | 4 | - | 1 | 6960 | 3737 | - 3704 |
| 942 | 550 | 7836 | 3267 | - | 6 | | 1 | 6564 | 3829 | - 3540 |
| 955 | 665 | 8021 | 3451 | - | 13 | | 1 | 6269 | 4295 | - 3482 |
| 967 | 769 | 8142 | 3574 | - | 12 | | 1 | 6071 | 4140 | - 3430 |
| 980 | 881 | 8275 | 3717 | - | 16 | 1 | 5893 | 4434 | - 3497 | - 2170 |

TWT 74 BLOW 16

CONFIG E29T9C2

2ND REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|------|--------|------|-------|-----|------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 671 | - 1047 | | 8304 | - 2498 | 1681 | - 71 | 52 | - 9 | - 3008 |
| 791 | - 827 | | 7784 | - 2247 | 1569 | - 68 | 48 | - 6 | - 2886 |
| 810 | - 649 | | 6999 | - 1836 | 1300 | - 133 | 66 | - 11 | - 2623 |
| 821 | - 549 | | 6417 | - 1473 | 1068 | - 104 | 67 | - 10 | - 2296 |
| 834 | - 429 | | 5639 | - 927 | 692 | - 47 | 38 | - 4 | - 1643 |
| 846 | - 319 | | 5369 | - 119 | 257 | - 22 | 6 | - 2 | - 222 |
| 858 | - 206 | | 5642 | - 573 | 65 | - 7 | 20 | - 1 | 1015 |
| 870 | - 95 | | 6040 | - 1109 | 283 | - 48 | 5 | - 2 | 1836 |
| 883 | - 25 | | 6529 | - 1529 | 467 | - 83 | 1 | - 3 | 2342 |
| 895 | 133 | | 6888 | 1797 | 627 | 104 | 13 | - 2 | 2609 |
| 906 | 232 | | 7224 | 2098 | 742 | 73 | 5 | - 1 | 2905 |
| 918 | 337 | | 7570 | 2306 | 821 | 102 | 1 | - 1 | 3046 |
| 930 | 446 | | 8052 | 2433 | 822 | 63 | 4 | - 1 | 3021 |
| 942 | 550 | | 8113 | 2501 | 776 | 85 | 6 | - 1 | 3083 |
| 955 | 665 | | 8367 | 2499 | 729 | 110 | 13 | - 1 | 2986 |
| 967 | 769 | | 8547 | 2453 | 691 | 120 | 12 | - 2 | 2870 |
| 980 | 881 | | 8747 | 2405 | 661 | 123 | 16 | - 2 | 2750 |

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Appendix "A"

TWT 74 BLOW 17

2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|-------|-----|------|------|------|-------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 744 | - 84 | | 912 | 1418 | 4917 | 28699 | 16707 | 5257 |
| 779 | 5 | | 903 | 1412 | 4914 | 28968 | 16527 | 5256 |
| 790 | 106 | | 899 | 1408 | 4901 | 28996 | 16420 | 5251 |
| 801 | 212 | | 902 | 1418 | 4929 | 29082 | 16559 | 5251 |
| 814 | 335 | | 893 | 1407 | 4907 | 29241 | 16313 | 5247 |
| 825 | 438 | | 888 | 1392 | 4864 | 29139 | 16081 | 5245 |
| 837 | 552 | | 894 | 1406 | 4898 | 29143 | 16313 | 5244 |
| 848 | 654 | | 889 | 1401 | 4888 | 29232 | 16187 | 5242 |
| 859 | 755 | | 892 | 1407 | 4898 | 29208 | 16268 | 5239 |
| 871 | 865 | | 888 | 1403 | 4896 | 29334 | 16180 | 5239 |
| 885 | 977 | | 886 | 1397 | 4873 | 29253 | 16069 | 5235 |

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TWT 74 BLOW 17 2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|-----|------|------|-----|-----|-------|-------|--------|-------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 744 | - | 84 | 6127 | 964 | 5 | 1 | 8687 | 262 | -3220 | -837 |
| 779 | - | 5 | 6394 | 1425 | 16 | | 8115 | -3032 | -3341 | -1157 |
| 790 | 106 | | 6704 | 1872 | 22 | - | 2 | 7908 | -56078 | -3453 |
| 801 | 212 | | 7070 | 2225 | 8 | - | 1 | 7718 | -631 | -3542 |
| 814 | 335 | | 7444 | 2712 | 9 | | 1 | 7355 | 2020 | -3756 |
| 825 | 438 | | 7567 | 2958 | 3 | | | 7015 | 2679 | -3678 |
| 837 | 552 | | 7753 | 3190 | - | 20 | 4 | 6655 | 4300 | -3682 |
| 848 | 654 | | 8016 | 3424 | - | 5 | | 1 | 6382 | 3633 |
| 859 | 755 | | 8076 | 3527 | - | 2 | 6178 | 3212 | -3683 | -2179 |
| 871 | 865 | | 8263 | 3664 | - | 3 | | 2 | 6011 | 3979 |
| 885 | 977 | | 8275 | 3752 | - | 6 | | 5836 | 3772 | -3653 |

TWT 74 BLOW 17

2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|------|------|-----|-----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 744 | - | 84 | 6112 | 1053 | - | 265 | 18 | 5 | 1 |
| 779 | 5 | 6395 | 1420 | - | 428 | 26 | 16 | - | 2220 |
| 790 | 106 | 6737 | 1748 | - | 598 | 4 | 22 | - | 1 |
| 801 | 212 | 7148 | 1962 | - | 709 | 22 | 8 | - | 2594 |
| 814 | 335 | 7590 | 2273 | - | 817 | 84 | 9 | 2 | 2744 |
| 825 | 438 | 7771 | 2372 | - | 815 | 74 | - | 3 | 2995 |
| 837 | 552 | 8024 | 2430 | - | 782 | 168 | - | 20 | 3052 |
| 848 | 654 | 8354 | 2489 | - | 759 | 94 | - | 5 | 3029 |
| 859 | 755 | 8469 | 2435 | - | 718 | 55 | - | 2 | 2979 |
| 871 | 865 | 8720 | 2379 | - | 690 | 38 | - | 3 | 2875 |
| 885 | 977 | 8792 | 2294 | - | 650 | 87 | - | 5 | 2729 |
| | | | | | | | | | 1 |
| | | | | | | | | | 2609 |

TWT 74 BLOW 18

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------------|-------|-----|------|------|-------|-------|------|-----|
| DEC= | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 525 - 1055 | | 885 | 1400 | 4900 | 29455 | 16138 | 5247 | |
| 651 - 839 | | 890 | 1412 | 4903 | 29297 | 16252 | 5223 | |
| 671 - 657 | | 883 | 1396 | 4858 | 29244 | 15970 | 5220 | |
| 684 - 538 | | 888 | 1403 | 4867 | 29138 | 16100 | 5218 | |
| 695 - 435 | | 888 | 1401 | 4856 | 29081 | 16059 | 5215 | |
| 707 - 325 | | 892 | 1403 | 4852 | 28942 | 16111 | 5211 | |
| 718 - 223 | | 894 | 1404 | 4849 | 28853 | 16150 | 5209 | |
| 731 - 102 | | 895 | 1399 | 4826 | 28682 | 16090 | 5206 | |
| 744 - 19 | | 902 | 1411 | 4851 | 28625 | 16296 | 5204 | |
| 757 - 141 | | 897 | 1406 | 4839 | 28702 | 16169 | 5203 | |
| 769 - 249 | | 898 | 1406 | 4832 | 28633 | 16161 | 5196 | |
| 780 - 348 | | 895 | 1402 | 4822 | 28658 | 16076 | 5196 | |
| 793 - 465 | | 893 | 1396 | 4806 | 28629 | 15982 | 5194 | |
| 805 - 574 | | 896 | 1404 | 4822 | 28645 | 16083 | 5189 | |
| 816 - 673 | | 889 | 1392 | 4794 | 28686 | 15864 | 5189 | |
| 828 - 778 | | 891 | 1394 | 4794 | 28617 | 15906 | 5187 | |
| 842 - 901 | | 888 | 1387 | 4772 | 28592 | 15770 | 5182 | |

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Appendix "A"

TWT 74 BLOW 18 2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|------|--------|-----|-----|------|-------|--------|--------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 525 | - 1055 | 7439 | - 3395 | 29 | 1 | 5396 | 9845 | - 3615 | 1832 | |
| 651 | - 839 | 7205 | - 3230 | 39 | | 5865 | 7832 | - 3638 | 1895 | |
| 671 | - 657 | 7116 | - 2961 | 17 | 1 | 6238 | 6822 | - 3699 | 1847 | |
| 684 | - 538 | 6894 | - 2590 | 36 | - | 1 | 6487 | 6831 | - 3770 | 1680 |
| 695 | - 435 | 6653 | - 2281 | 51 | - | 3 | 6682 | 8060 | - 3680 | 1524 |
| 707 | - 325 | 6177 | - 1782 | 49 | - | 3 | 6769 | 7748 | - 3484 | 1206 |
| 718 | - 223 | 5795 | - 1265 | 46 | - | 2 | 6677 | 8104 | - 3249 | 845 |
| 731 | - 102 | 5455 | - 618 | 50 | - | 4 | 6103 | 7768 | - 2899 | 377 |
| 744 | 19 | 5215 | 147 | 25 | - | 3 | 9432 | 6910 | - 2638 | - 139 |
| 757 | 141 | 5645 | 1017 | 8 | - | 1 | 6862 | 115561 | - 2819 | - 698 |
| 769 | 249 | 5945 | 1599 | 4 | | 1 | 6959 | 2108 | - 2993 | - 1112 |
| 780 | 348 | 6345 | 2026 | 8 | | 1 | 6997 | 2033 | - 3276 | - 1416 |
| 793 | 465 | 6655 | 2461 | 8 | - | 1 | 6734 | 1345 | - 3366 | - 1658 |
| 805 | 574 | 6971 | 2785 | - 5 | | | 6516 | 3872 | - 3508 | - 1815 |
| 816 | 673 | 7197 | 3075 | 10 | - | 2 | 6272 | - 2341 | - 3612 | - 1928 |
| 828 | 778 | 7177 | 3229 | - 3 | | 1 | 6077 | 3637 | - 3449 | - 1962 |
| 842 | 901 | 7270 | 3414 | - 6 | - | 2 | 5793 | 4322 | - 3353 | - 1978 |

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Appendix "A"

TWT 74 BLOW 18

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|------|-----|-----|-----|-----|----------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 525 | - 1055 | 7934 | - 1976 | 1095 | - | 44 | 29 | - | 5 - 2491 |
| 651 | - 839 | 7599 | - 2145 | 1199 | - | 83 | 38 | - | 6 - 2822 |
| 671 | - 657 | 7409 | - 2127 | 1232 | - | 45 | 17 | - | 1 - 2871 |
| 684 | - 538 | 7106 | - 1932 | 1171 | - | 97 | 36 | - | 4 - 2719 |
| 695 | - 435 | 6807 | - 1769 | 1102 | - | 104 | 51 | - | 6 - 2599 |
| 707 | - 325 | 6268 | - 1429 | 919 | - | 105 | 48 | - | 6 - 2280 |
| 718 | - 223 | 5840 | - 1038 | 703 | - | 92 | 45 | - | 4 - 1778 |
| 731 | - 102 | 5465 | - 521 | 424 | - | 107 | 49 | - | 5 - 954 |
| 744 | 19 | 5215 | 130 | 137 | - | 66 | 25 | - | 3 - 249 |
| 757 | 141 | 5669 | 878 | 131 | - | 6 | 8 | - | 1 - 1548 |
| 769 | 249 | 6009 | 1339 | - | 350 | 43 | 4 | 1 | 2227 |
| 780 | 348 | 6456 | 1637 | - | 503 | 71 | 8 | 2 | 2536 |
| 793 | 465 | 6833 | 1913 | - | 593 | 47 | 8 | | 2800 |
| 805 | 574 | 7215 | 2073 | - | 635 | 71 | - | 5 | 2874 |
| 816 | 673 | 7508 | 2210 | - | 648 | 18 | 10 | - | 1 - 2944 |
| 828 | 778 | 7547 | 2228 | - | 634 | 66 | - | 3 | 2952 |
| 842 | 901 | 7715 | 2233 | - | 588 | 48 | - | 5 | 2 - 2894 |

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Appendix "A"

TWT 74 BLOW 19

2ND REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|--------|-----|------|------|------|-------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | | | 1 | 1 |
| 566 | - 1034 | | 880 | 1388 | 4879 | 29478 | 15979 | 5256 |
| 603 | - 802 | | 886 | 1401 | 4887 | 29324 | 16128 | 5237 |
| 622 | - 623 | | 887 | 1402 | 4881 | 29259 | 16123 | 5228 |
| 635 | - 503 | | 890 | 1408 | 4888 | 29218 | 16194 | 5223 |
| 647 | - 392 | | 891 | 1403 | 4861 | 29027 | 16123 | 5216 |
| 659 | - 281 | | 895 | 1408 | 4866 | 28913 | 16228 | 5215 |
| 671 | - 173 | | 897 | 1410 | 4864 | 28852 | 16252 | 5209 |
| 683 | - 62 | | 904 | 1424 | 4891 | 28807 | 16462 | 5204 |
| 695 | 49 | | 896 | 1408 | 4851 | 28807 | 16186 | 5203 |
| 708 | 164 | | 901 | 1417 | 4864 | 28721 | 16330 | 5198 |
| 721 | 283 | | 897 | 1414 | 4855 | 28803 | 16218 | 5191 |
| 733 | 390 | | 899 | 1416 | 4856 | 28758 | 16254 | 5189 |
| 746 | 508 | | 894 | 1410 | 4840 | 28811 | 16110 | 5184 |
| 758 | 616 | | 894 | 1412 | 4839 | 28799 | 16112 | 5180 |
| 771 | 732 | | 892 | 1416 | 4852 | 28949 | 16113 | 5175 |
| 783 | 837 | | 886 | 1404 | 4823 | 28949 | 15908 | 5174 |
| 799 | 963 | | 890 | 1415 | 4845 | 28974 | 16048 | 5168 |

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TWT 74 BLOW 19

2ND REDUCTION

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | PBC | CMA |
|-----|--------|-----|------|--------|-----|-----|-------|-------|--------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 566 | - 1034 | | 8370 | - 4247 | 62 | 3 | 6469 | 13145 | - 3852 |
| 603 | - 802 | | 7733 | - 3888 | 57 | 2 | 6823 | 11046 | - 3794 |
| 622 | - 623 | | 6993 | - 3153 | 52 | | 7060 | 10841 | - 3656 |
| 635 | - 503 | | 6561 | - 2620 | 49 | | 7240 | 11145 | - 3493 |
| 647 | - 392 | | 6051 | - 2048 | 43 | 1 | 7342 | 25599 | - 3223 |
| 659 | - 281 | | 5620 | - 1524 | 61 | - | 7456 | 9364 | - 3020 |
| 671 | - 173 | | 5000 | - 1054 | 51 | - | 7727 | 11289 | - 2754 |
| 683 | - 62 | | 4525 | - 511 | 57 | - | 7179 | 12550 | - 2514 |
| 695 | 49 | | 4815 | 557 | 29 | | 7792 | 42030 | - 2332 |
| 708 | 164 | | 5116 | 1120 | 11 | | 7765 | 2388 | - 2520 |
| 721 | 283 | | 5743 | 1676 | - 4 | | 7589 | 3567 | - 2827 |
| 733 | 390 | | 6610 | 2168 | - | 1 | 7512 | 3315 | - 2978 |
| 746 | 508 | | 6676 | 2752 | - | 4 | 7293 | 3812 | - 3200 |
| 758 | 616 | | 7024 | 3233 | 7 | 1 | 7165 | 2253 | - 3383 |
| 771 | 732 | | 7509 | 3719 | 3 | - | 1 | 7003 | 2668 |
| 783 | 837 | | 8011 | 3984 | - | 14 | - | 6841 | 4980 |
| 799 | 963 | | 8161 | 4212 | - | 31 | 2 | 6615 | 5999 |

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Appendix "A"

TWT 74 BLOW 19 2ND REDUCTION

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|------|------|-----|-----|------|----------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 566 | - 1034 | 8996 | - 2675 | 1784 | - | 62 | 62 | - | 2974 |
| 603 | - 802 | 8200 | - 2771 | 1774 | - | 72 | 57 | - | 3380 |
| 622 | - 623 | 7294 | - 2376 | 1545 | - | 68 | 52 | - | 3257 |
| 635 | - 503 | 6765 | - 2036 | 1364 | - | 62 | 49 | - | 3009 |
| 647 | - 392 | 6177 | - 1629 | 1128 | - | 19 | 43 | - | 2 - 2638 |
| 659 | - 281 | 5687 | - 1247 | 906 | - | 98 | 61 | - | 6 - 2193 |
| 671 | - 173 | 5030 | - 902 | 704 | - | 63 | 51 | - | 3 - 1794 |
| 683 | - 62 | 4531 | - 462 | 406 | - | 61 | 57 | - | 2 - 1019 |
| 695 | 49 | 4819 | 516 | - | 48 | - | 8 | 29 | 1071 |
| 708 | 164 | 5146 | 972 | - | 293 | 19 | 11 | 11 | 1889 |
| 721 | 283 | 5819 | 1390 | - | 494 | 89 | - | 4 | 2389 |
| 733 | 390 | 6742 | 1713 | - | 658 | 57 | - | 1 | 2540 |
| 746 | 508 | 6894 | 2150 | - | 851 | 63 | - | 4 | 3118 |
| 758 | 616 | 7330 | 2460 | - | 994 | 76 | 7 | 2 | 3356 |
| 771 | 732 | 7921 | 2732 | - | 1108 | 73 | 3 | 3449 | |
| 783 | 837 | 8505 | 2776 | - | 1124 | 76 | - | 14 | 2 - 3264 |
| 799 | 963 | 8750 | 2788 | - | 1107 | 107 | - | 31 | - 3 3186 |

TWT 74 BLOW 20
CONFIG E32T9C2

2ND REDUCTION

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|-----|--------|-----|------|------|------|-------|-------|------|
| DEC | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 687 | - 1036 | | 905 | 1400 | 4869 | 28635 | 16417 | 5257 |
| 751 | - 848 | | 895 | 1411 | 4915 | 29226 | 16377 | 5244 |
| 773 | - 649 | | 899 | 1411 | 4897 | 28973 | 16407 | 5239 |
| 786 | - 531 | | 901 | 1412 | 4891 | 28876 | 16424 | 5235 |
| 800 | - 402 | | 905 | 1420 | 4903 | 28819 | 16541 | 5230 |
| 815 | - 267 | | 901 | 1410 | 4880 | 28835 | 16370 | 5228 |
| 828 | - 151 | | 898 | 1404 | 4857 | 28778 | 16247 | 5225 |
| 840 | - 44 | | 904 | 1416 | 4887 | 28778 | 16450 | 5223 |
| 852 | 63 | | 897 | 1406 | 4864 | 28867 | 16243 | 5220 |
| 864 | 171 | | 902 | 1423 | 4906 | 28937 | 16488 | 5216 |
| 876 | 276 | | 891 | 1405 | 4863 | 29034 | 16138 | 5213 |
| 888 | 379 | | 895 | 1413 | 4876 | 28973 | 16258 | 5209 |
| 900 | 487 | | 893 | 1413 | 4879 | 29071 | 16226 | 5208 |
| 913 | 601 | | 889 | 1406 | 4859 | 29079 | 16081 | 5204 |
| 925 | 706 | | 889 | 1404 | 4851 | 29034 | 16049 | 5203 |
| 936 | 801 | | 889 | 1406 | 4852 | 29038 | 16056 | 5198 |
| 949 | 909 | | 887 | 1403 | 4843 | 29042 | 15992 | 5196 |

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TWT 74 BLOW 20 2ND REDUCTION

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|------|--------|------|-------|--------|--------|--------|--------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 687 | - 1036 | 7199 | - 3730 | 49 | 7425 | 9072 | - 3721 | 2769 | | |
| 751 | - 848 | 6536 | - 3011 | 78 | 2 | 7666 | 8236 | - 3452 | 2308 | |
| 773 | - 649 | 5408 | - 1878 | 57 | 1 | 7601 | 11615 | - 2757 | 1428 | |
| 786 | - 531 | 4555 | - 1106 | 53 | 3 | 6988 | 8310 | - 2367 | 773 | |
| 800 | - 402 | 4437 | 59 | 28 | 24471 | 13775 | - 2129 | - 145 | | |
| 815 | - 267 | 5027 | 948 | 12 | 9315 | - 4216 | - 2456 | - 883 | | |
| 828 | - 151 | 5715 | 1385 | 37 | - | 3 | 8143 | 9657 | - 2810 | - 1128 |
| 840 | - 44 | 6212 | 1651 | 24 | - | 1 | 7320 | - 5682 | - 2992 | - 1208 |
| 852 | 63 | 6705 | 2017 | 11 | 6972 | - 502 | - 3280 | - 1407 | | |
| 864 | 171 | 6971 | 2441 | 11 | 6926 | - 1210 | - 3479 | - 1690 | | |
| 876 | 276 | 7463 | 2935 | 10 | - | 1 | 7003 | 448 | - 3743 | - 2056 |
| 888 | 379 | 7669 | 3215 | - 3 | 1 | 6879 | 3518 | - 3648 | - 2211 | |
| 900 | 487 | 8055 | 3567 | 34 | - | 1 | 6551 | - 27 | - 3696 | - 2337 |
| 913 | 601 | 8211 | 3816 | 7 | - | 2 | 6221 | 2185 | - 3705 | - 2374 |
| 925 | 706 | 8458 | 3992 | - 13 | - | 1 | 5982 | 4451 | - 3660 | - 2388 |
| 936 | 801 | 8668 | 4139 | - 9 | - | 2 | 5835 | 4800 | - 3636 | - 2415 |
| 949 | 909 | 8778 | 4193 | - 12 | - | 2 | 5663 | 5106 | - 3713 | - 2374 |

TWT 74 BLOW 20

2ND REDUCTION

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|------|--------|-------|-------|------|------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 687 | - 1036 | | 7753 | - 2374 | 1917 | - 82 | 48 | - 9 | - 3063 |
| 751 | - 848 | | 6909 | - 2014 | 1652 | - 153 | 77 | - 14 | - 2915 |
| 773 | - 649 | | 5586 | - 1255 | 1077 | - 68 | 57 | - 7 | - 2246 |
| 786 | - 531 | | 4638 | - 680 | 627 | - 102 | 52 | - 7 | - 1466 |
| 800 | - 402 | | 4422 | 370 | 69 | - 26 | 28 | - 2 | 837 |
| 815 | - 267 | | 4978 | 1181 | 364 | - 16 | 12 | | 2373 |
| 828 | - 151 | | 5677 | 1535 | - 442 | - 57 | 37 | - 4 | 2704 |
| 840 | - 44 | | 6199 | 1699 | - 418 | 2 | 24 | - 1 | 2741 |
| 852 | 63 | | 6726 | 1943 | - 479 | 41 | 11 | | 2889 |
| 864 | 171 | | 7041 | 2232 | - 618 | 24 | 11 | | 3170 |
| 876 | 276 | | 7595 | 2573 | - 807 | 39 | 10 | - 1 | 3387 |
| 888 | 379 | | 7865 | 2700 | - 866 | 85 | - 3 | 1 | 3433 |
| 900 | 487 | | 8329 | 2870 | - 864 | 107 | 34 | 2 | 3446 |
| 913 | 601 | | 8565 | 2935 | - 816 | 71 | 7 | - 1 | 3427 |
| 925 | 706 | | 8884 | 2923 | - 764 | 102 | - 13 | - 2 | 3290 |
| 936 | 801 | | 9160 | 2892 | - 736 | 55 | - 9 | - 4 | 3157 |
| 949 | 909 | | 9330 | 2754 | - 674 | 60 | - 11 | - 4 | 2951 |

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Appendix "A"

TWT 74 BLOW 21 2ND REDUCTION

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|--------|-----|-------|------|-------|-------|-------|-------|
| DEC= | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 702 | - 1032 | 719 | 1 359 | 5290 | 37484 | 13571 | 13571 | 13571 |
| 746 | - 791 | 717 | 1 349 | 5246 | 37257 | 13398 | 13398 | 13398 |
| 763 | - 636 | 715 | 1 341 | 5219 | 37110 | 13289 | 13289 | 13289 |
| 775 | - 528 | 719 | 1 344 | 5212 | 36947 | 13354 | 13354 | 13354 |
| 786 | - 425 | 719 | 1 348 | 5225 | 37037 | 13394 | 13394 | 13394 |
| 799 | - 306 | 715 | 1 340 | 5197 | 36947 | 13240 | 13240 | 13240 |
| 810 | - 208 | 720 | 1 350 | 5219 | 36959 | 13401 | 13401 | 13401 |
| 821 | - 108 | 715 | 1 342 | 5206 | 37029 | 13249 | 13249 | 13249 |
| 834 | 9 | 719 | 1 356 | 5234 | 37077 | 13436 | 13436 | 13436 |
| 847 | 124 | 714 | 1 347 | 5222 | 37183 | 13257 | 13257 | 13257 |
| 859 | 230 | 709 | 1 331 | 5173 | 36996 | 13019 | 13019 | 13019 |
| 872 | 342 | 716 | 1 341 | 5180 | 36817 | 13203 | 13203 | 13203 |
| 885 | 457 | 715 | 1 340 | 5179 | 36849 | 13173 | 13173 | 13173 |
| 896 | 554 | 715 | 1 346 | 5197 | 36963 | 13225 | 13225 | 13225 |
| 910 | 676 | 714 | 1 343 | 5185 | 36923 | 13163 | 13163 | 13163 |
| 924 | 798 | 714 | 1 346 | 5194 | 36972 | 13200 | 13200 | 13200 |
| 937 | 906 | 711 | 1 337 | 5168 | 36894 | 13056 | 13056 | 13056 |

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Appendix "A"

TWT 74 BLOW 21

2ND REDUCTION

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | DEC= | ALPHA | YAW | CA | CN | CNB | CLB | -XCPY | PBC | CMA |
|-----|------|-------|------|----|------|-----|------|-------|-------|------|
| | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 702 | - | 1032 | 6835 | - | 3782 | 53 | 6969 | 10109 | - | 3811 |
| 746 | - | 791 | 6003 | - | 2921 | 56 | 7298 | 9482 | - | 3366 |
| 763 | - | 636 | 5144 | - | 2109 | 71 | - | 2 | 7349 | 9788 |
| 775 | - | 528 | 4417 | - | 1342 | 78 | - | 4 | 6980 | 8427 |
| 786 | - | 425 | 4486 | - | 119 | 39 | - | 2 | - | 2269 |
| 799 | - | 306 | 4703 | - | 974 | 12 | - | 9157 | - | 2371 |
| 810 | - | 208 | 5252 | 1 | 448 | 12 | 8529 | - | 40498 | - |
| 821 | - | 108 | 5778 | 1 | 805 | 2 | 7816 | 3195 | - | 3058 |
| 834 | - | 9 | 6196 | 2 | 006 | 23 | - | 1 | 6831 | - |
| 847 | - | 124 | 6765 | 2 | 335 | 7 | 6270 | 1608 | - | 3519 |
| 859 | - | 230 | 7098 | 2 | 637 | 4 | 6117 | 2320 | - | 3586 |
| 872 | - | 342 | 7132 | 2 | 915 | - | 1 | 6125 | - | 4627 |
| 885 | - | 457 | 7418 | 3 | 302 | - | 13 | 5951 | - | 6381 |
| 896 | - | 554 | 7647 | 3 | 502 | 11 | - | 1 | 5735 | 1964 |
| 910 | - | 676 | 7857 | 3 | 685 | - | 1 | 5478 | - | 3258 |
| 924 | - | 798 | 8134 | 3 | 871 | - | 1 | 5300 | 4340 | - |
| 937 | - | 906 | 8179 | 3 | 974 | - | 2 | 5123 | 4872 | - |

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Appendix "A"

TWT 74 BLOW 21

2ND REDUCTION

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|-------|-------|----|-----|-----|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 702 | - 1032 | 7402 | - 2496 | 1750 | - 77 | 53 | - | 9 | - 3372 |
| 746 | - 791 | 6348 | - 2067 | 1480 | - 89 | 56 | - | 7 | - 3256 |
| 763 | - 636 | 5346 | - 1527 | 1115 | - 106 | 70 | - | 9 | - 2855 |
| 775 | - 528 | 4522 | - 930 | 710 | - 148 | 78 | - | 11 | - 2057 |
| 786 | - 425 | 4483 | 214 | 130 | - 65 | 39 | - | 5 | 477 |
| 799 | - 306 | 4644 | 1223 | - 380 | 4 | 12 | - | 1 | 2634 |
| 810 | - 208 | 5196 | 1638 | - 550 | 3 | 12 | - | | 3152 |
| 821 | - 108 | 5743 | 1914 | - 591 | 60 | | | 2 | 3333 |
| 834 | 9 | 6199 | 1996 | - 469 | 11 | 23 | - | 1 | 3220 |
| 847 | 124 | 6814 | 2189 | - 434 | 49 | 7 | - | | 3212 |
| 859 | 230 | 7198 | 2350 | - 474 | 47 | 4 | 1 | | 3264 |
| 872 | 342 | 7294 | 2484 | - 558 | 61 | - | 9 | | 3405 |
| 885 | 457 | 7657 | 2701 | - 604 | 39 | - | 13 | - | 1 |
| 896 | 554 | 7949 | 2747 | - 574 | 91 | 11 | - | | 3456 |
| 910 | 676 | 8236 | 2735 | - 518 | 86 | - | 1 | | 3320 |
| 924 | 798 | 8593 | 2705 | - 480 | 108 | - | 13 | - | 3148 |
| 937 | 906 | 8703 | 2636 | - 430 | 70 | - | 12 | - | 3029 |

TWT 74 BLOW 22

CONFIG E29T9C2

TUNNEL CONDITIONS

2ND REDUCTION

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------------|-------|-----|------|------|-------|-------|---|------|
| DEC | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 509 - 1026 | | 716 | 1346 | 5261 | 37373 | 13427 | | 5264 |
| 555 - 798 | | 717 | 1346 | 5242 | 37210 | 13394 | | 5252 |
| 571 - 651 | | 716 | 1339 | 5213 | 37043 | 13292 | | 5247 |
| 582 - 549 | | 719 | 1351 | 5245 | 37181 | 13440 | | 5245 |
| 594 - 438 | | 713 | 1332 | 5195 | 37006 | 13177 | | 5244 |
| 606 - 326 | | 721 | 1351 | 5228 | 36970 | 13469 | | 5240 |
| 617 - 223 | | 714 | 1334 | 5192 | 36974 | 13182 | | 5239 |
| 629 - 113 | | 724 | 1356 | 5232 | 36917 | 13539 | | 5237 |
| 640 - 10 | | 715 | 1345 | 5220 | 37120 | 13293 | | 5232 |
| 652 - 98 | | 716 | 1347 | 5220 | 37088 | 13317 | | 5230 |
| 664 - 206 | | 715 | 1340 | 5197 | 36970 | 13224 | | 5228 |
| 676 - 314 | | 713 | 1335 | 5176 | 36868 | 13198 | | 5223 |
| 687 - 413 | | 716 | 1339 | 5180 | 36819 | 13205 | | 5221 |
| 699 - 521 | | 716 | 1343 | 5191 | 36876 | 13249 | | 5218 |
| 712 - 637 | | 717 | 1352 | 5221 | 37071 | 13335 | | 5216 |
| 724 - 741 | | 710 | 1332 | 5171 | 36957 | 13029 | | 5215 |
| 736 - 848 | | 717 | 1341 | 5170 | 36709 | 13208 | | 5211 |
| 749 - 952 | | 716 | 1342 | 5176 | 36782 | 13201 | | 5209 |

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Appendix "A"

TWT 74 BLOW 22

CONFIG E29T9C2

2ND REDUCTION

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | DEC= | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|------|-------|------|------|------|------|-----|-------|-------|-------|------|
| 509 | - | 1026 | 2 | 7165 | - | 3843 | 41 | 2 | 6129 | 10507 | - |
| 555 | - | 798 | 6797 | - | 3300 | 61 | 1 | 6496 | 8627 | - | 3994 |
| 571 | - | 651 | 6304 | - | 2663 | 58 | - | 1 | 6589 | 8718 | - |
| 582 | - | 549 | 6080 | - | 2215 | 59 | - | 1 | 6662 | 9844 | - |
| 594 | - | 438 | 5406 | - | 1515 | 47 | - | 3 | 6375 | 7887 | - |
| 606 | - | 326 | 4705 | - | 435 | 25 | - | 2481 | 9607 | - | 2855 |
| 617 | - | 223 | 5277 | - | 470 | 3 | - | 1 | 11911 | 1735 | - |
| 629 | - | 113 | 5542 | - | 940 | 17 | - | 8735 | - | 2865 | - |
| 640 | - | 10 | 6140 | - | 1396 | 10 | - | 3 | 7689 | 3084 | - |
| 652 | - | 98 | 6344 | - | 1740 | - | 4 | 3 | 7374 | 3583 | - |
| 664 | - | 206 | 6658 | - | 2138 | 5 | - | 2 | 7090 | 2290 | - |
| 676 | - | 314 | 6856 | - | 2497 | 2 | - | 3 | 6728 | 2973 | - |
| 687 | - | 413 | 7008 | - | 2714 | 3 | - | 2 | 6439 | 2825 | - |
| 699 | - | 521 | 7274 | - | 2993 | 1 | - | 1 | 6065 | 3125 | - |
| 712 | - | 637 | 7440 | - | 3231 | 1 | - | 1 | 5868 | 3011 | - |
| 724 | - | 741 | 7582 | - | 3274 | 2 | - | 1 | 5729 | 2797 | - |
| 736 | - | 848 | 7643 | - | 3333 | 10 | - | 3 | 5586 | 3971 | - |
| 749 | - | 952 | 7854 | - | 3480 | 3 | - | 3 | 5426 | 1076 | - |
| | | | | | | | | | | | 1888 |

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Appendix "A"

TWT 74 BLOW 22 2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|--------|--------|--------|-------|------|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 509 | - 1026 | | 7735 - | 2505 | 1466 - | 55 | 41 - | 5 - | 3239 |
| 555 | - 798 | | 7189 - | 2325 | 1408 - | 111 | 60 - | 8 - | 3234 |
| 571 | - 651 | | 6565 - | 1931 | 1197 - | 105 | 58 - | 8 - | 2942 |
| 582 | - 549 | | 6264 - | 1623 | 1049 - | 88 | 58 - | 6 - | 2590 |
| 594 | - 438 | | 5505 - | 1098 | 729 - | 99 | 47 - | 7 - | 1994 |
| 606 | - 326 | | 4722 - | 166 | 179 - | 38 | 25 - | 1 - | 352 |
| 617 | - 223 | | 5254 | 675 - | 180 | 21 | 3 | 1 | 1284 |
| 629 | - 113 | | 5522 | 1049 - | 282 | 28 | 17 | | 1900 |
| 640 | - 10 | | 6137 | 1407 - | 366 | 76 | | 3 | 2292 |
| 652 | 98 | | 6373 | 1631 - | 458 | 82 - | 4 | 3 | 2560 |
| 664 | 206 | | 6730 | 1898 - | 553 | 63 | 5 | 2 | 2820 |
| 676 | 314 | | 6983 | 2118 - | 596 | 150 | 2 | 4 | 3033 |
| 687 | 413 | | 7185 | 2203 - | 588 | 101 | 3 | 2 | 3066 |
| 699 | 521 | | 7515 | 2320 - | 557 | 69 | 1 | 1 | 3086 |
| 712 | 637 | | 7753 | 2386 - | 556 | 101 | 1 | 1 | 3078 |
| 724 | 741 | | 7941 | 2269 - | 516 | 47 | 2 | | 2857 |
| 736 | 848 | | 8051 | 2170 - | 481 | 123 - | 11 | 2 | 2695 |
| 749 | 952 | | 8322 | 2133 - | 452 | 15 | 3 - | 2 | 2563 |

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SID-62-627
Appendix "A"

TWT 74 BLOW 23 2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|--------|-----|------|------|------|-------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | | | 1 | 1 |
| 510 | - 1018 | | 720 | 1349 | 5245 | 37128 | 13483 | 5256 |
| 550 | - 795 | | 718 | 1354 | 5261 | 37315 | 13470 | 5247 |
| 564 | - 668 | | 709 | 1326 | 5192 | 37128 | 13064 | 5245 |
| 576 | - 557 | | 722 | 1358 | 5255 | 37132 | 13558 | 5244 |
| 587 | - 455 | | 712 | 1341 | 5234 | 37327 | 13248 | 5244 |
| 600 | - 334 | | 718 | 1348 | 5231 | 37103 | 13387 | 5240 |
| 611 | - 233 | | 716 | 1343 | 5218 | 37087 | 13301 | 5239 |
| 625 | - 104 | | 713 | 1337 | 5201 | 37050 | 13192 | 5233 |
| 637 | 6 | | 719 | 1345 | 5206 | 36892 | 13349 | 5232 |
| 649 | 121 | | 717 | 1348 | 5223 | 37095 | 13337 | 5230 |
| 661 | 231 | | 717 | 1347 | 5215 | 37022 | 13325 | 5228 |
| 673 | 340 | | 715 | 1341 | 5203 | 37026 | 13232 | 5228 |
| 685 | 449 | | 715 | 1339 | 5187 | 36900 | 13198 | 5223 |
| 697 | 557 | | 716 | 1341 | 5187 | 36863 | 13228 | 5221 |
| 708 | 657 | | 716 | 1346 | 5204 | 36965 | 13283 | 5220 |
| 725 | 805 | | 715 | 1341 | 5186 | 36892 | 13195 | 5216 |
| 739 | 925 | | 715 | 1341 | 5176 | 36798 | 13184 | 5211 |
| 750 | 989 | | 715 | 1345 | 5189 | 36896 | 13218 | 5209 |

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Appendix "A"

TWT 74 BLOW 23 2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|------|--------|-----|------|--------|-----|-----|-------|--------|--------|--------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 510 | - 1018 | - | 7013 | - 3253 | 20 | 2 | 5019 | 10691 | - 3902 | 1633 | |
| 550 | - 795 | - | 6667 | - 3045 | 44 | - | 1 | 5441 | 7612 | - 3881 | |
| 564 | - 668 | - | 6522 | - 2872 | 38 | 1 | 5661 | 9709 | - 3828 | 1626 | |
| 576 | - 557 | - | 6150 | - 2560 | 34 | 1 | 5899 | 9983 | - 3820 | 1510 | |
| 587 | - 455 | - | 6033 | - 2341 | 49 | - | 1 | 6063 | 8249 | - 3853 | |
| 600 | - 334 | - | 5607 | - 1824 | 41 | - | 2 | 6159 | 7794 | - 3510 | |
| 611 | - 233 | - | 5393 | - 1343 | 51 | - | 3 | 6093 | 8313 | - 3306 | |
| 625 | - 104 | - | 5184 | - 583 | 26 | - | 1 | 5589 | 9534 | - 3036 | |
| 637 | 6 | - | 4935 | 1 | 19 | 1 | - | -17524 | 2899 | - 326 | |
| 649 | 121 | - | 5175 | 832 | 1 | 2 | 6050 | 3318 | - 2918 | 503 | |
| 661 | 231 | - | 5498 | 1393 | 3 | 1 | 6320 | 2648 | - 3097 | 880 | |
| 673 | 340 | - | 5784 | 1905 | - | 1 | 6304 | 3299 | - 3343 | 1201 | |
| 685 | 449 | - | 6048 | 2337 | 9 | 1 | 6122 | 1859 | - 3508 | - 1431 | |
| 697 | 557 | - | 6313 | 2658 | 5 | - | 5938 | 2438 | - 3568 | - 1578 | |
| 708 | 657 | - | 6545 | 2854 | 1 | - | 5786 | 2846 | - 3713 | - 1651 | |
| 725 | 805 | - | 6915 | 3050 | 11 | - | 5528 | 4591 | - 3664 | - 1686 | |
| 739 | 925 | - | 6959 | 3131 | - | 9 | 5254 | 4086 | - 3639 | - 1645 | |
| 750 | 989 | - | 6965 | 3216 | - | 8 | 1 | 5098 | 3867 | - 3775 | - 1640 |

TWT 74 BLOW 23

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|------|--------|-------|------|------|-----|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 510 | - 1018 | | 7477 | - 1963 | 921 | - 26 | 20 | - 2 | - 2625 |
| 550 | - 795 | | 7024 | - 2094 | 996 | - 97 | 43 | - 7 | - 2981 |
| 564 | - 668 | | 6812 | - 2093 | 1012 | - 58 | 38 | - 4 | - 3072 |
| 576 | - 557 | | 6369 | - 1951 | 978 | - 50 | 34 | - 2 | - 3063 |
| 587 | - 455 | | 6199 | - 1855 | 951 | - 96 | 49 | - 5 | - 2993 |
| 600 | - 334 | | 5704 | - 1494 | 798 | - 88 | 41 | - 5 | - 2619 |
| 611 | - 233 | | 5443 | - 1123 | 634 | - 98 | 51 | - 5 | - 2063 |
| 625 | - 104 | | 5193 | - 489 | 371 | - 41 | 26 | - 2 | - 941 |
| 637 | 6 | | 4935 | - 4 | 185 | 9 | 19 | 1 | 9 |
| 649 | 121 | | 5191 | 723 | - 15 | 64 | - 1 | 2 | 1392 |
| 661 | 231 | | 5550 | 1170 | - 202 | 63 | 3 | 1 | 2108 |
| 673 | 340 | | 5887 | 1559 | - 349 | 60 | - 1 | 1 | 2648 |
| 685 | 449 | | 6212 | 1856 | - 432 | 67 | 8 | 1 | 2988 |
| 697 | 557 | | 6541 | 2033 | - 467 | 72 | 5 | 1 | 3108 |
| 708 | 657 | | 6828 | 2087 | - 469 | 42 | 1 | 1 | 3057 |
| 725 | 805 | | 7274 | 2051 | - 426 | 73 | - 11 | - 1 | 2820 |
| 739 | 925 | | 7372 | 1972 | - 357 | 97 | - 9 | 1 | 2675 |
| 750 | 989 | | 7414 | 1972 | - 325 | 112 | - 8 | 1 | 2660 |

TWT 74 BLOW 24 2ND REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|-------|-------|-----|------|------|------|-------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | 5275 | 37329 | 1 | 1 |
| 645 - | 1035 | | 721 | 1359 | | | | 5251 |
| 702 - | 800 | | 717 | 1349 | 5246 | 37244 | 13400 | 5244 |
| 719 - | 644 | | 714 | 1340 | 5214 | 37113 | 13246 | 5239 |
| 732 - | 523 | | 714 | 1337 | 5205 | 37052 | 13222 | 5239 |
| 744 - | 412 | | 720 | 1354 | 5242 | 37105 | 13472 | 5237 |
| 755 - | 312 | | 714 | 1338 | 5201 | 37016 | 13224 | 5235 |
| 767 - | 202 | | 719 | 1353 | 5232 | 37061 | 13430 | 5230 |
| 778 - | 103 | | 717 | 1347 | 5219 | 37061 | 13330 | 5230 |
| 790 | 10 | | 720 | 1352 | 5225 | 37008 | 13414 | 5228 |
| 803 | 128 | | 717 | 1344 | 5199 | 36910 | 13280 | 5229 |
| 815 | 238 | | 715 | 1339 | 5185 | 36886 | 13193 | 5221 |
| 827 | 347 | | 720 | 1351 | 5208 | 36881 | 13374 | 5220 |
| 839 | 457 | | 716 | 1347 | 5208 | 37008 | 13280 | 5218 |
| 851 | 564 | | 716 | 1348 | 5209 | 37008 | 13289 | 5216 |
| 863 | 672 | | 711 | 1335 | 5174 | 36934 | 13072 | 5213 |
| 874 | 769 | | 714 | 1339 | 5172 | 36808 | 13144 | 5209 |
| 887 | 882 | | 715 | 1337 | 5162 | 36723 | 13129 | 5209 |
| 909 | 1013 | | 709 | 1331 | 5153 | 36845 | 12968 | 5201 |

TWT 74 BLOW 24 2ND REDUCTION

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|------|--------|----|-----|------|-------|--------|--------|--------|
| DEC# | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 645 | - 1035 | 8022 | - 4087 | 60 | 2 | 6014 | 11694 | - 4110 | 2458 | |
| 702 | - 800 | 7286 | - 3635 | 43 | 3 | 6395 | 11682 | - 3739 | 2324 | |
| 719 | - 644 | 6854 | - 3352 | 53 | - | 6580 | 6924 | - 3540 | 2205 | |
| 732 | - 523 | 6354 | - 2858 | 77 | - | 2 | 6733 | 8991 | - 3429 | 1924 |
| 744 | - 412 | 5947 | - 2287 | 72 | - | 2 | 6790 | 8647 | - 3299 | 1553 |
| 755 | - 312 | 5444 | - 1752 | 70 | - | 2 | 6835 | 9158 | - 2970 | 1197 |
| 767 | - 202 | 5194 | - 1173 | 57 | - | 2 | 6936 | 9391 | - 2852 | 814 |
| 778 | - 103 | 4768 | - 777 | 71 | - | 3 | 7230 | 9176 | - 2683 | 561 |
| 790 | 10 | 4747 | 204 | 57 | - | 3 | 8115 | 9320 | - 2379 | 166 |
| 803 | 128 | 4917 | 941 | 2 | 2 | 2 | 7507 | 2860 | - 2538 | 707 |
| 815 | 238 | 5219 | 1450 | - | 15 | 4 | 7072 | 4528 | - 2806 | - 1026 |
| 827 | 347 | 5445 | 2020 | 10 | 1 | 1 | 7055 | 491 | - 2954 | - 1425 |
| 839 | 457 | 6094 | 2652 | - | 15 | 3 | 6899 | 4613 | - 3213 | - 1829 |
| 851 | 564 | 6533 | 3169 | - | 2 | 1 | 6776 | 3429 | - 3378 | - 2147 |
| 863 | 672 | 7050 | 3493 | - | 2 | 2 | 6667 | 3305 | - 3571 | - 2329 |
| 874 | 769 | 7168 | 3663 | - | 1 | 1 | 6554 | 3322 | - 3528 | - 2400 |
| 887 | 882 | 7520 | 3847 | - | 22 | 2 | 6337 | 6116 | - 3612 | - 2438 |
| 909 | 1013 | 8032 | 4096 | - | 17 | | 6101 | 5005 | - 3781 | - 2499 |

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Appendix "A"

TWT 74 BLOW 24 2ND REDUCTION

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | L/D |
|------|--------|------|--------|------|-------|------|-----|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 645 | - 1035 | 8626 | - 2579 | 1529 | - 70 | 59 | - 9 | - 2990 |
| 702 | - 800 | 7721 | - 2585 | 1506 | - 50 | 43 | - 3 | - 3348 |
| 719 | - 644 | 7187 | - 2562 | 1456 | - 140 | 52 | - 8 | - 3565 |
| 732 | - 523 | 6587 | - 2267 | 1308 | - 131 | 76 | - 9 | - 3441 |
| 744 | - 412 | 6096 | - 1855 | 1098 | - 130 | 71 | - 8 | - 3042 |
| 755 | - 312 | 5531 | - 1453 | 888 | - 116 | 69 | - 6 | - 2627 |
| 767 | - 202 | 5233 | - 989 | 675 | - 90 | 56 | - 4 | - 1891 |
| 778 | - 103 | 4781 | - 691 | 528 | - 117 | 71 | - 4 | - 1446 |
| 790 | 10 | 4747 | 196 | 107 | 93 | 57 | - 3 | 412 |
| 803 | 128 | 4937 | 831 | 195 | 60 | 2 | - 3 | 1684 |
| 815 | 238 | 5275 | 1232 | 341 | 110 | - 15 | 3 | 2336 |
| 827 | 347 | 5558 | 1687 | 552 | 39 | 10 | 2 | 3035 |
| 839 | 457 | 6286 | 2158 | 730 | 104 | - 16 | 2 | 3433 |
| 851 | 564 | 6813 | 2511 | 866 | 76 | - 2 | 1 | 3686 |
| 863 | 672 | 7410 | 2644 | 924 | 101 | - 2 | 2 | 3568 |
| 874 | 769 | 7594 | 2670 | 937 | 72 | - 1 | | 3516 |
| 887 | 882 | 8020 | 2649 | 901 | 75 | - 22 | 2 | 3303 |
| 909 | 1013 | 8627 | 2619 | 861 | 90 | - 17 | - 3 | 3036 |

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Appendix "A"

TWT 74 BLOW 25

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | DEC= | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|-----|--------|-------|-----|------|------|------|-------|-------|------|
| 746 | - 1009 | 2 | 2 | 1174 | 1427 | 4644 | 19811 | 1 | 1 |
| 795 | - 658 | | | 1192 | 1450 | 4708 | 19628 | 19111 | 5230 |
| 807 | - 547 | | | 1187 | 1438 | 4663 | 19546 | 19510 | 5225 |
| 819 | - 433 | | | 1192 | 1430 | 4634 | 19301 | 19291 | 5220 |
| 833 | - 308 | | | 1198 | 1445 | 4682 | 19346 | 19210 | 5218 |
| 844 | - 209 | | | 1198 | 1442 | 4673 | 19318 | 19450 | 5218 |
| 856 | - 98 | | | 1199 | 1440 | 4662 | 19240 | 19410 | 5216 |
| 871 | 35 | | | 1200 | 1432 | 4634 | 19118 | 19373 | 5215 |
| 884 | 153 | | | 1205 | 1443 | 4666 | 19110 | 19260 | 5213 |
| 897 | 267 | | | 1199 | 1439 | 4653 | 19212 | 19332 | 5209 |
| 910 | 385 | | | 1199 | 1442 | 4659 | 19232 | 19202 | 5209 |
| 923 | 503 | | | 1195 | 1434 | 4627 | 19195 | 19359 | 5204 |
| 937 | 628 | | | 1197 | 1441 | 4650 | 19248 | 19309 | 5201 |
| 950 | 745 | | | 1193 | 1444 | 4653 | 19363 | 19291 | 5196 |
| 962 | 852 | | | 1187 | 1435 | 4627 | 19407 | 19137 | 5196 |
| 976 | 967 | | | 1187 | 1433 | 4612 | 19354 | 19076 | 5189 |

TWT 74 BLOW 25

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|------|--------|------|-----|------|--------|--------|--------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 746 | - 1009 | 9333 | - 4128 | 35 | 6 | 6449 | - 3395 | - 3460 | 2662 | |
| 795 | - 658 | 8841 | - 2672 | 38 | 1 | 6749 | 18196 | - 3413 | 1803 | |
| 807 | - 547 | 8281 | - 2165 | 33 | 2 | 6748 | 19420 | - 3360 | 1461 | |
| 819 | - 433 | 7783 | - 1667 | 37 | | 6826 | 16984 | - 3173 | 1138 | |
| 833 | - 308 | 7484 | - 1158 | 41 | - | 1 | 6980 | 10869 | - 3084 | 808 |
| 844 | - 209 | 7475 | - 840 | 42 | - | 1 | 7627 | 14759 | - 2989 | 641 |
| 856 | - 98 | 7675 | - 494 | 39 | - | 1 | 8465 | 58213 | - 2841 | 418 |
| 871 | 35 | 6943 | 212 | 17 | | 2 | 10470 | - 3338 | - 2630 | - 222 |
| 884 | 153 | 7521 | 621 | - 5 | | 2 | 8569 | 4029 | - 2696 | - 532 |
| 897 | 267 | 7957 | 1004 | - 14 | | 2 | 7639 | 5346 | - 2803 | - 767 |
| 910 | 385 | 8255 | 1429 | - 20 | 1 | 7166 | 6134 | - 2876 | - 1024 | |
| 923 | 503 | 8231 | 1965 | - 4 | - | 1 | 6916 | 4108 | - 2946 | - 1359 |
| 937 | 628 | 8071 | 2512 | - 22 | | 1 | 6921 | 5851 | - 3076 | - 1739 |
| 950 | 745 | 8657 | 3099 | - 4 | - | 2 | 6895 | 4511 | - 3208 | - 2137 |
| 962 | 852 | 9179 | 3547 | - 7 | - | 1 | 6767 | 4170 | - 3245 | - 2400 |
| 976 | 967 | 8285 | 3984 | - 21 | 1 | 6548 | 5872 | - 3210 | - 2609 | |

TWT 74 BLOW 25

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|--------|------|--------|----|------|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 746 | - 1009 | | 9912 - | 2428 | 1820 | 55 | 36 - | 1 - | 2450 |
| 795 | - 658 | | 9089 - | 1642 | 1381 | 25 | 38 - | 4 - | 1806 |
| 807 | - 547 | | 8449 - | 1366 | 1168 | 20 | 33 - | 1 - | 1616 |
| 819 | - 433 | | 7887 - | 1075 | 974 | 27 | 37 - | 3 - | 1363 |
| 833 | - 308 | | 7535 - | 755 | 786 | 52 | 40 - | 3 - | 1001 |
| 844 | - 209 | | 7500 - | 567 | 715 | 35 | 41 - | 3 - | 755 |
| 856 | - 98 | | 7682 - | 362 | 606 | 7 | 39 - | 1 - | 472 |
| 871 | - 35 | | 6944 - | 169 | 148 | 49 | 17 - | 2 - | 244 |
| 884 | 153 | | 7535 - | 420 | - 13 | 51 | - 5 | 2 | 557 |
| 897 | 267 | | 7996 - | 632 | - 112 | 60 | - 14 | 1 | 790 |
| 910 | 385 | | 8332 - | 872 | - 227 | 63 | - 20 | | 1046 |
| 923 | 503 | | 8372 - | 1235 | - 400 | 39 | - 4 | 1 | 1475 |
| 937 | 628 | | 8298 - | 1614 | - 621 | 79 | - 22 | 1 | 1945 |
| 950 | 745 | | 8986 - | 1951 | - 815 | 29 | - 4 | 2 | 2171 |
| 962 | 852 | | 9603 - | 2148 | - 920 | 63 | - 7 | 2 | 2237 |
| 976 | 967 | | 8837 - | 2536 | - 1035 | 73 | - 21 | 3 | 2869 |

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Appendix "A"

TWT 74 BLOW 29 2ND REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|-----|--------|-----|------|------|------|-------|-------|------|
| 477 | - 1054 | 2 | 1197 | 2 | 4663 | 19315 | 1 | 1 |
| 536 | - 830 | 2 | 1186 | 1432 | 4666 | 19584 | 19359 | 5244 |
| 555 | - 653 | 2 | 1193 | 1446 | 4710 | 19608 | 19298 | 5239 |
| 567 | - 542 | 2 | 1190 | 1437 | 4684 | 19568 | 19397 | 5237 |
| 579 | - 431 | 2 | 1191 | 1429 | 4654 | 19412 | 19281 | 5235 |
| 592 | - 313 | 2 | 1194 | 1428 | 4648 | 19319 | 19280 | 5233 |
| 604 | - 203 | 2 | 1201 | 1442 | 4686 | 19298 | 19487 | 5230 |
| 616 | - 92 | 2 | 1200 | 1437 | 4672 | 19261 | 19419 | 5230 |
| 628 | 19 | 2 | 1201 | 1431 | 4650 | 19159 | 19335 | 5230 |
| 640 | 126 | 2 | 1203 | 1438 | 4669 | 19180 | 19429 | 5225 |
| 652 | 236 | 2 | 1199 | 1434 | 4652 | 19196 | 19334 | 5223 |
| 664 | 344 | 2 | 1198 | 1428 | 4633 | 19159 | 19244 | 5221 |
| 675 | 444 | 2 | 1199 | 1432 | 4642 | 19180 | 19287 | 5220 |
| 687 | 555 | 2 | 1197 | 1429 | 4629 | 19164 | 19220 | 5216 |
| 700 | 673 | 2 | 1195 | 1431 | 4638 | 19249 | 19243 | 5216 |
| 711 | 771 | 2 | 1193 | 1437 | 4652 | 19347 | 19291 | 5213 |
| 723 | 878 | 2 | 1188 | 1432 | 4634 | 19412 | 19176 | 5211 |
| 737 | 992 | 2 | 1186 | 1437 | 4646 | 19514 | 19211 | 5206 |

~~CONFIDENTIAL~~

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Appendix "A"

TWT 74 BLOW 29 2ND REDUCTION

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPY | PBC | CMA | | | |
|------|-------|------|-------|----|------|-------|-------|-------|-------|-------|-------|--|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 477 | -1054 | 8795 | -4078 | 11 | 5 | 6346 | 846 | -3277 | 2588 | | | |
| 536 | -830 | 8911 | -3452 | 40 | 1 | 6659 | 11710 | -3407 | 2299 | | | |
| 555 | -653 | 8456 | -2668 | 32 | 1 | 6778 | 15975 | -3396 | 1808 | | | |
| 567 | -542 | 8551 | -2155 | 44 | 6711 | 13262 | -3348 | 1446 | | | | |
| 579 | -431 | 7885 | -1629 | 37 | 1 | 6742 | 20852 | -3173 | 1098 | | | |
| 592 | -313 | 7640 | -1181 | 25 | 1 | 6935 | 14076 | -3047 | 819 | | | |
| 604 | -203 | 7550 | -815 | 32 | 7594 | 29579 | -2935 | 619 | | | | |
| 616 | -92 | 7081 | -480 | 42 | - | 1 | 8476 | 11810 | -2828 | 407 | | |
| 628 | 19 | 6812 | 127 | 35 | | 10975 | 77995 | -2628 | -139 | | | |
| 640 | 126 | 7321 | 542 | - | 2 | 8930 | 3437 | -2683 | 484 | | | |
| 652 | 236 | 7349 | 901 | - | 10 | 2 | 7820 | 4762 | -2762 | -704 | | |
| 664 | 344 | 7702 | 1279 | - | 22 | 7185 | 5551 | -2801 | = 919 | | | |
| 675 | 444 | 7930 | 1692 | - | 10 | 1 | 6970 | 4997 | -2871 | -1179 | | |
| 687 | 555 | 8392 | 2215 | - | 16 | 1 | 6896 | 5090 | -2980 | -1528 | | |
| 700 | 673 | 8439 | 2751 | - | 16 | 1 | 6890 | 4976 | -3132 | -1896 | | |
| 711 | 771 | 8826 | 3216 | - | 19 | | 6849 | 5814 | -3203 | -2203 | | |
| 723 | 878 | 8814 | 3651 | - | 9 | - | 2 | 6684 | 5541 | -3240 | -2440 | |
| 737 | 992 | 9338 | 4050 | - | 26 | - | 1 | 6514 | 7326 | -3254 | -2638 | |

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Appendix "A"

TWT 74 BLOW 29

CONFIG E25T9C2

2ND REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|------|--------|------|----|-----|-----|--------|
| | | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| DEC= | | | | | | | | | |
| 477 | - 1054 | | 9393 | - 2400 | 1697 | 47 | 12 | 3 | - 2555 |
| 536 | - 830 | | 9316 | - 2130 | 1609 | 46 | 39 | 5 | - 2287 |
| 555 | - 653 | | 8704 | - 1690 | 1344 | 25 | 32 | 3 | - 1941 |
| 567 | - 542 | | 8717 | - 1338 | 1147 | 44 | 44 | 4 | - 1534 |
| 579 | - 431 | | 7985 | - 1031 | 934 | 21 | 37 | 2 | - 1292 |
| 592 | - 313 | | 7693 | - 763 | 785 | 23 | 25 | 1 | - 992 |
| 604 | - 203 | | 7574 | - 548 | 696 | 12 | 32 | 1 | - 723 |
| 616 | - 92 | | 7088 | - 367 | 568 | 48 | 42 | 2 | - 517 |
| 628 | 19 | | 6812 | 104 | 200 | 5 | 35 | 1 | 152 |
| 640 | 126 | | 7332 | 381 | 8 | 52 | 2 | 2 | - 519 |
| 652 | 236 | | 7380 | 597 | 99 | 63 | 10 | 1 | 809 |
| 664 | 344 | | 7765 | 814 | 179 | 90 | 22 | 1 | 1048 |
| 675 | 444 | | 8038 | 1072 | 300 | 52 | 10 | 1 | 1334 |
| 687 | 555 | | 8567 | 1394 | 464 | 80 | 16 | 1 | 1627 |
| 700 | 673 | | 8703 | 1744 | 662 | 85 | 16 | 1 | 2004 |
| 711 | 771 | | 9178 | 2002 | 806 | 70 | 18 | 3 | 2181 |
| 723 | 878 | | 9268 | 2263 | 908 | 38 | 9 | 3 | 2441 |
| 737 | 992 | | 9896 | 2381 | 958 | 63 | 26 | 6 | 2407 |

TWT 74 BLOW 30

3RD REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|-------|-----|------|------|-------|-------|------|-----|
| DEC= | 2 | 2 | 3 | 2 | | | 1 | 1 |
| 603 | 1011 | 889 | 1406 | 4909 | 29358 | 16257 | 5244 | |
| 659 | 1238 | 883 | 1418 | 4943 | 29765 | 16249 | 5228 | |
| 673 | 1369 | 882 | 1420 | 4946 | 29797 | 16244 | 5223 | |
| 685 | 1482 | 875 | 1400 | 4890 | 29704 | 15916 | 5220 | |
| 697 | 1591 | 882 | 1414 | 4919 | 29647 | 16151 | 5218 | |
| 708 | 1691 | 879 | 1409 | 4908 | 29667 | 16061 | 5216 | |
| 721 | 1811 | 880 | 1411 | 4910 | 29663 | 16078 | 5215 | |
| 733 | 1921 | 878 | 1409 | 4902 | 29675 | 16019 | 5211 | |
| 745 | 2032 | 879 | 1407 | 4888 | 29573 | 15979 | 5206 | |
| 758 | 2153 | 878 | 1407 | 4887 | 29569 | 15974 | 5204 | |
| 770 | 2261 | 879 | 1407 | 4884 | 29537 | 15972 | 5201 | |
| 781 | 2361 | 878 | 1403 | 4865 | 29455 | 15895 | 5198 | |
| 794 | 2477 | 882 | 1414 | 4893 | 29496 | 16064 | 5196 | |
| 806 | 2584 | 879 | 1407 | 4872 | 29476 | 15930 | 5192 | |
| 819 | 2703 | 877 | 1400 | 4846 | 29354 | 15821 | 5189 | |
| 830 | 2802 | 882 | 1406 | 4855 | 29256 | 15945 | 5187 | |
| 842 | 2909 | 880 | 1406 | 4856 | 29337 | 15900 | 5184 | |
| 858 | 3027 | 875 | 1396 | 4825 | 29293 | 15714 | 5180 | |

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Appendix "A"

TWT 74 BLOW 30

3RD REDUCTION

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|------|-----|-----|------|-------|-------|-------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 603 | 1011 | 8579 | 4360 | - | 32 | 11 | 6305 | 6222 | -4173 | -2749 |
| 659 | 1238 | 8828 | 4612 | - | 24 | 9 | 5909 | 6356 | -4177 | -2726 |
| 673 | 1369 | 8895 | 4698 | - | 9 | 7 | 5646 | 5739 | -4218 | -2653 |
| 685 | 1482 | 8993 | 4866 | - | 18 | 13 | 5454 | 4948 | -4316 | -2654 |
| 697 | 1591 | 8992 | 4908 | - | 19 | 12 | 5297 | 5410 | -4252 | -2600 |
| 708 | 1691 | 9018 | 5046 | - | 29 | 12 | 5108 | 6854 | -4299 | -2578 |
| 721 | 1811 | 9139 | 5148 | - | 30 | 10 | 4891 | 9135 | -4316 | -2518 |
| 733 | 1921 | 8991 | 5282 | - | 28 | 15 | 4740 | 6782 | -4182 | -2504 |
| 745 | 2032 | 8840 | 5387 | - | 26 | 12 | 4573 | 8281 | -4099 | -2464 |
| 758 | 2153 | 8792 | 5569 | - | 25 | 12 | 4428 | 7140 | -4147 | -2466 |
| 770 | 2261 | 8691 | 5743 | - | 24 | 12 | 4333 | 6346 | -4082 | -2489 |
| 781 | 2361 | 8631 | 5844 | - | 13 | 11 | 4194 | 6304 | -3996 | -2451 |
| 794 | 2477 | 8501 | 5982 | 7 | 10 | 4083 | 2007 | -3925 | -2442 | |
| 806 | 2584 | 8395 | 6113 | 36 | 8 | 3935 | -3502 | -3901 | -2406 | |
| 819 | 2703 | 8156 | 6277 | 60 | 8 | 3771 | -3764 | -3721 | -2367 | |
| 830 | 2802 | 8013 | 6392 | 77 | 12 | 3631 | -1278 | -3645 | -2321 | |
| 842 | 2909 | 8010 | 6629 | 122 | 10 | 3486 | -3332 | -3771 | -2311 | |
| 858 | 3027 | 7887 | 6867 | 169 | 11 | 3297 | -4659 | -3757 | -2264 | |

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Appendix "A"

TWT 74 BLOW 30

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|-------|-----|----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 603 | 1011 | 9212 | 2786 | -1057 | 100 | - | 33 | 5 | 3025 |
| 659 | 1238 | 9612 | 2612 | -946 | 73 | - | 26 | 4 | 2718 |
| 673 | 1369 | 9754 | 2460 | -844 | 34 | - | 11 | 5 | 2522 |
| 685 | 1482 | 9939 | 2405 | -791 | 120 | - | 21 | 8 | 2420 |
| 697 | 1591 | 9993 | 2255 | -724 | 79 | - | 21 | 6 | 2257 |
| 708 | 1691 | 10096 | 2204 | -659 | 75 | - | 31 | 3 | 2183 |
| 721 | 1811 | 10286 | 2052 | -563 | 49 | - | 32 | 1 | 1995 |
| 733 | 1921 | 10229 | 2030 | -515 | 74 | - | 31 | 5 | 1984 |
| 745 | 2032 | 10160 | 1983 | -450 | 49 | - | 28 | 2 | 1952 |
| 758 | 2153 | 10222 | 1954 | -399 | 60 | - | 27 | 2 | 1912 |
| 770 | 2261 | 10231 | 1961 | -374 | 71 | - | 27 | 2 | 1916 |
| 781 | 2361 | 10249 | 1898 | -308 | 39 | - | 16 | 5 | 1852 |
| 794 | 2477 | 10226 | 1869 | -264 | 65 | - | 2 | 12 | 1828 |
| 806 | 2584 | 10220 | 1843 | -192 | 55 | - | 29 | 23 | 1803 |
| 819 | 2703 | 10117 | 1885 | -115 | 89 | - | 50 | 34 | 1863 |
| 830 | 2802 | 10077 | 1879 | -40 | 180 | - | 63 | 47 | 1865 |
| 842 | 2909 | 10223 | 1898 | -41 | 192 | - | 102 | 68 | 1857 |
| 858 | 3027 | 10273 | 1955 | 154 | 220 | - | 140 | 94 | 1903 |

TWT 74 BLOW 31

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| DEC= | BN | ALPHA | YAW 2 | MACH 3 | RN 2 | HO | PO | Q | TT0 | TTO |
|------|------|-------|-------|--------|------|-------|-------|------|-----|-----|
| 644 | 1031 | 2 | 905 | 1442 | 4993 | 29366 | 16833 | 5239 | | |
| 704 | 1254 | | 883 | 1405 | 4902 | 29513 | 16113 | 5230 | | |
| 716 | 1366 | | 882 | 1404 | 4900 | 29545 | 16081 | 5228 | | |
| 727 | 1466 | | 883 | 1411 | 4914 | 29578 | 16160 | 5223 | | |
| 741 | 1594 | | 879 | 1396 | 4870 | 29468 | 15922 | 5223 | | |
| 753 | 1703 | | 881 | 1400 | 4877 | 29419 | 15997 | 5220 | | |
| 765 | 1813 | | 883 | 1404 | 4883 | 29295 | 16056 | 5218 | | |
| 777 | 1921 | | 879 | 1395 | 4857 | 29362 | 15895 | 5216 | | |
| 789 | 2034 | | 889 | 1414 | 4895 | 29277 | 16209 | 5211 | | |
| 801 | 2144 | | 884 | 1407 | 4882 | 29378 | 16059 | 5211 | | |
| 813 | 2256 | | 888 | 1414 | 4896 | 29334 | 16185 | 5209 | | |
| 825 | 2363 | | 880 | 1396 | 4847 | 29281 | 15870 | 5206 | | |
| 837 | 2473 | | 887 | 1406 | 4864 | 29175 | 16054 | 5204 | | |
| 843 | 2526 | | 888 | 1409 | 4871 | 29183 | 16101 | 5203 | | |
| 861 | 2690 | | 884 | 1399 | 4840 | 29114 | 15928 | 5198 | | |
| 873 | 2800 | | 888 | 1407 | 4854 | 29069 | 16051 | 5196 | | |
| 885 | 2907 | | 883 | 1396 | 4825 | 29041 | 15868 | 5194 | | |
| 897 | 3006 | | 889 | 1402 | 4831 | 28918 | 15984 | 5191 | | |

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Appendix "A"

TWT 74 BLOW 31

2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA. PBC) /Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|------|------|-----|-----|------|--------|-------|-------|-------|
| 644 | 1031 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 704 | 1254 | 7643 | 3482 | - | 17 | 10 | 5399 | 5401 | -4165 | -1880 |
| 716 | 1366 | 7942 | 3685 | - | 19 | 11 | 4906 | 4999 | -4118 | -1808 |
| 727 | 1466 | 7952 | 3802 | - | 18 | 10 | 4707 | 5040 | -4181 | -1790 |
| 741 | 1594 | 7877 | 3879 | - | 15 | 5 | 4586 | 8470 | -4117 | -1779 |
| 753 | 1703 | 7795 | 4095 | - | 15 | 7 | 4496 | 5446 | -4070 | -1841 |
| 765 | 1813 | 7678 | 4239 | - | 14 | 7 | 4347 | 4962 | -3986 | -1843 |
| 777 | 1921 | 7556 | 4347 | - | 28 | 7 | 4236 | 6746 | -3980 | -1841 |
| 789 | 2034 | 7495 | 4534 | - | 28 | 5 | 4125 | 6805 | -3965 | -1870 |
| 801 | 2144 | 7095 | 4595 | - | 21 | 3 | 3997 | 7430 | -3704 | -1837 |
| 813 | 2256 | 7224 | 4886 | - | 27 | 6 | 3899 | 6829 | -3861 | -1905 |
| 825 | 2363 | 6951 | 5013 | - | 9 | 3 | 3773 | 5041 | -3715 | -1892 |
| 837 | 2473 | 6863 | 5245 | - | 7 | 3 | 3672 | 3723 | -3716 | -1926 |
| 843 | 2526 | 6746 | 5387 | 28 | 1 | 3569 | -2894 | -3730 | -1923 | |
| 861 | 2690 | 6618 | 5528 | 27 | 2 | 3512 | -183 | -3749 | -1941 | |
| 873 | 2800 | 6473 | 5833 | 21 | 1 | 3330 | -1550 | -3786 | -1942 | |
| 885 | 2907 | 6295 | 6013 | 74 | 1 | 3192 | -18074 | -3710 | -1919 | |
| 897 | 3006 | 6048 | 6274 | 98 | 2 | 3053 | -6319 | -3704 | -1916 | |
| | | 5910 | 6433 | 130 | -4 | 2959 | -11861 | -3705 | -1904 | |

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Appendix "A"

TWT 74 BLOW 31

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|------|------|-----|-----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 644 | 1031 | 8143 | 2058 | -493 | 70 | - | 18 | 6 | 2527 |
| 704 | 1254 | 8553 | 1872 | -347 | 98 | - | 21 | 6 | 2188 |
| 716 | 1366 | 8625 | 1817 | -293 | 87 | - | 20 | 5 | 2106 |
| 727 | 1466 | 8602 | 1759 | -262 | 27 | - | 16 | 1 | 2045 |
| 741 | 1594 | 8619 | 1797 | -263 | 61 | - | 16 | 3 | 2085 |
| 753 | 1703 | 8583 | 1805 | -226 | 72 | - | 15 | 2 | 2103 |
| 765 | 1813 | 8534 | 1780 | -198 | 76 | - | 29 | - | 2086 |
| 777 | 1921 | 8570 | 1815 | -173 | 74 | - | 28 | - | 2118 |
| 789 | 2034 | 8249 | 1842 | -138 | 47 | - | 20 | - | 5 |
| 801 | 2144 | 8510 | 1907 | -113 | 72 | - | 28 | - | 5 |
| 813 | 2256 | 8342 | 1963 | -74 | 47 | - | 10 | - | 1 |
| 825 | 2363 | 8390 | 2054 | -42 | 104 | - | 8 | - | 2353 |
| 837 | 2473 | 8381 | 2070 | -1 | 48 | - | 25 | 13 | 2448 |
| 843 | 2526 | 8344 | 2174 | 17 | 96 | 24 | 14 | 14 | 2606 |
| 861 | 2690 | 8412 | 2272 | 102 | 46 | 19 | 10 | 10 | 2702 |
| 873 | 2800 | 8381 | 2354 | 171 | 35 | 66 | 34 | 34 | 2809 |
| 885 | 2907 | 8334 | 2546 | 243 | 105 | 85 | 49 | 49 | 3054 |
| 897 | 3006 | 8338 | 2607 | 297 | 87 | 114 | 62 | 62 | 3127 |

TWT 74 BLOW 32
2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| DEC= | BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|------|-------|-----|------|------|-------|-------|---|------|
| | | 2 | 2 | 3 | 2 | | | 1 | 1 |
| 615 | 1018 | | 919 | 1441 | 4968 | 28777 | 17004 | | 5245 |
| 666 | 1239 | | 904 | 1411 | 4883 | 28740 | 16450 | | 5237 |
| 680 | 1367 | | 906 | 1417 | 4900 | 28781 | 16539 | | 5235 |
| 691 | 1469 | | 905 | 1424 | 4924 | 28960 | 16601 | | 5235 |
| 703 | 1580 | | 904 | 1422 | 4913 | 28928 | 16545 | | 5230 |
| 715 | 1690 | | 897 | 1402 | 4863 | 28858 | 16238 | | 5230 |
| 726 | 1792 | | 909 | 1428 | 4923 | 28822 | 16673 | | 5228 |
| 733 | 1859 | | 904 | 1421 | 4910 | 28911 | 16530 | | 5228 |
| 750 | 2016 | | 899 | 1401 | 4843 | 28655 | 16225 | | 5223 |
| 763 | 2136 | | 910 | 1425 | 4902 | 28679 | 16611 | | 5220 |
| 775 | 2247 | | 903 | 1415 | 4878 | 28748 | 16412 | | 5218 |
| 787 | 2357 | | 905 | 1417 | 4878 | 28700 | 16441 | | 5216 |
| 798 | 2455 | | 900 | 1407 | 4850 | 28675 | 16260 | | 5211 |
| 810 | 2564 | | 904 | 1411 | 4851 | 28545 | 16342 | | 5209 |
| 822 | 2672 | | 907 | 1412 | 4853 | 28480 | 16395 | | 5213 |
| 834 | 2783 | | 905 | 1412 | 4848 | 28516 | 16341 | | 5204 |
| 846 | 2891 | | 903 | 1408 | 4836 | 28508 | 16263 | | 5204 |
| 860 | 3007 | | 908 | 1413 | 4841 | 28382 | 16369 | | 5201 |

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TWT 74 BLOW 32

2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | 4 |
|------|-------|------|------|-----|-----|-----|-------|--------|-------|-------|---|
| DEC= | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 615 | 1018 | 8696 | 3873 | - | 26 | 13 | 5646 | 4954 | -4339 | -2186 | |
| 666 | 1239 | 8764 | 4041 | - | 13 | 12 | 5275 | 4686 | -4236 | -2132 | |
| 680 | 1367 | 8814 | 4130 | - | 20 | 15 | 5110 | 4771 | -4219 | -2110 | |
| 691 | 1469 | 8982 | 4308 | - | 19 | 15 | 4966 | 4708 | -4335 | -2139 | |
| 703 | 1580 | 8903 | 4373 | - | 15 | 14 | 4847 | 4272 | -4335 | -2120 | |
| 715 | 1690 | 8944 | 4551 | - | 11 | 16 | 4717 | 3739 | -4271 | -2147 | |
| 726 | 1792 | 8662 | 4586 | - | 15 | 14 | 4582 | 4430 | -4124 | -2101 | |
| 733 | 1859 | 8744 | 4758 | - | 14 | 13 | 4448 | 4271 | -4209 | -2117 | |
| 750 | 2016 | 8523 | 5020 | - | 4 | 13 | 4214 | 2628 | -4047 | -2116 | |
| 763 | 2136 | 8208 | 5118 | - | 1 | 10 | 4051 | 2778 | -3901 | -2073 | |
| 775 | 2247 | 8333 | 5398 | - | 12 | 10 | 3934 | 1687 | -3943 | -2124 | |
| 787 | 2357 | 8054 | 5522 | - | 24 | 8 | 3794 | 620 | -3814 | -2095 | |
| 798 | 2455 | 8107 | 5681 | - | 37 | 10 | 3743 | -258 | -3881 | -2126 | |
| 810 | 2564 | 7789 | 5816 | - | 34 | 7 | 3611 | -162 | -3690 | -2100 | |
| 822 | 2672 | 7691 | 6017 | - | 45 | 8 | 3479 | 225 | -3710 | -2093 | |
| 834 | 2783 | 7554 | 6231 | - | 77 | 2 | 3343 | -6822 | -3672 | -2083 | |
| 846 | 2891 | 7442 | 6489 | - | 88 | 3 | 3227 | -3685 | -3656 | -2094 | |
| 860 | 3007 | 7180 | 6615 | 136 | 3 | 3 | 3045 | -13235 | -3555 | -2015 | |

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Appendix "A"

TWT 74 BELOW 32 2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|---------|-----|-------|-----|-----|------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 615 | 1018 | 9243 | 2 274 - | 636 | 132 - | 28 | 9 | 2461 | |
| 666 | 1239 | 9427 | 2068 - | 527 | 75 - | 15 | 9 | 2193 | |
| 680 | 1367 | 9541 | 1930 - | 477 | 115 - | 23 | 10 | 2023 | |
| 691 | 1469 | 9781 | 1890 - | 445 | 112 - | 22 | 9 | 1933 | |
| 703 | 1580 | 9757 | 1785 - | 409 | 117 - | 18 | 9 | 1829 | |
| 715 | 1690 | 9881 | 1755 - | 381 | 146 - | 15 | 13 | 1776 | |
| 726 | 1792 | 9653 | 1698 - | 337 | 103 - | 18 | 9 | 1759 | |
| 733 | 1859 | 9805 | 1723 - | 297 | 115 - | 18 | 8 | 1757 | |
| 750 | 2016 | 9731 | 1775 - | 226 | 105 - | 1 | 13 | 1825 | |
| 763 | 2136 | 9598 | 1777 - | 168 | 48 - | 3 | 10 | 1869 | |
| 775 | 2247 | 9763 | 1804 - | 129 | 88 - | 7 | 14 | 1848 | |
| 787 | 2357 | 9590 | 1840 - | 75 | 99 - | 19 | 16 | 1919 | |
| 798 | 2455 | 9734 | 1799 - | 56 | 112 - | 29 | 25 | 1848 | |
| 810 | 2564 | 9539 | 1872 - | 3 | 108 - | 28 | 22 | 1963 | |
| 822 | 2672 | 9575 | 1917 - | 60 | 160 - | 36 | 27 | 2002 | |
| 834 | 2783 | 9589 | 1984 - | 129 | 78 - | 67 | 38 | 2069 | |
| 846 | 2891 | 9652 | 2083 - | 191 | 132 - | 76 | 46 | 2158 | |
| 860 | 3007 | 9528 | 2127 - | 297 | 83 - | 116 | 71 | 2232 | |

TWT 74 BLOW 33

2ND REDUCTION

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|-----|------|------|-------|-------|------|-----|
| DEC | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 880 | 1015 | 912 | 1415 | 4949 | 28892 | 16807 | 5292 | |
| 944 | 1240 | 891 | 1389 | 4867 | 29050 | 16153 | 5263 | |
| 958 | 1370 | 901 | 1405 | 4895 | 28900 | 16437 | 5257 | |
| 970 | 1481 | 896 | 1394 | 4859 | 28867 | 16210 | 5251 | |
| 981 | 1584 | 906 | 1419 | 4923 | 28920 | 16613 | 5247 | |
| 993 | 1697 | 895 | 1402 | 4884 | 29034 | 16279 | 5245 | |
| 1004 | 1800 | 901 | 1411 | 4892 | 28892 | 16420 | 5239 | |
| 1016 | 1912 | 903 | 1424 | 4932 | 29063 | 16590 | 5237 | |
| 1028 | 2023 | 890 | 1391 | 4835 | 28883 | 16032 | 5230 | |
| 1041 | 2141 | 898 | 1398 | 4844 | 28704 | 16199 | 5228 | |
| 1053 | 2255 | 906 | 1418 | 4890 | 28729 | 16502 | 5225 | |
| 1065 | 2363 | 902 | 1414 | 4883 | 28798 | 16412 | 5223 | |
| 1077 | 2475 | 893 | 1394 | 4828 | 28765 | 16052 | 5218 | |
| 1089 | 2585 | 899 | 1398 | 4821 | 28521 | 16151 | 5215 | |
| 1101 | 2695 | 903 | 1409 | 4848 | 28574 | 16303 | 5211 | |
| 1112 | 2796 | 902 | 1407 | 4842 | 28570 | 16267 | 5208 | |
| 1124 | 2906 | 899 | 1400 | 4819 | 28529 | 16137 | 5206 | |
| | 3016 | 901 | 1401 | 4814 | 28424 | 16163 | 5203 | |

TWT 74 BLOW 33 2ND REDUCTION

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|------|------|-------|------|----|-----|-----|------|-------|-------|------|------|---|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 880 | 1015 | 9227 | 4365 | - | 15 | 10 | 5401 | 4855 | - | 4294 | - | |
| 944 | 1240 | 9594 | 4594 | - | 21 | 14 | 5058 | 4805 | - | 4424 | - | |
| 958 | 1370 | 9457 | 4592 | - | 25 | 14 | 4839 | 5683 | - | 4261 | - | |
| 970 | 1481 | 9537 | 4796 | - | 21 | 15 | 4688 | 4846 | - | 4354 | - | |
| 981 | 1584 | 9388 | 4811 | - | 24 | 15 | 4603 | 5041 | - | 4290 | - | |
| 993 | 1697 | 9582 | 5069 | - | 12 | 12 | 4466 | 4066 | - | 4356 | - | |
| 1004 | 1800 | 9289 | 5061 | - | 9 | 11 | 4353 | 4115 | - | 4159 | - | |
| 1016 | 1912 | 9336 | 5243 | - | 20 | 13 | 4267 | 4859 | - | 4220 | - | |
| 1028 | 2023 | 9428 | 5380 | - | 8 | 13 | 4129 | 3710 | - | 4146 | - | |
| 1041 | 2141 | 9094 | 5420 | - | 17 | 10 | 4002 | 5180 | - | 3983 | - | |
| 1053 | 2255 | 8849 | 5577 | - | 7 | 9 | 3896 | 3866 | - | 3887 | - | |
| 1065 | 2363 | 8805 | 5757 | - | 15 | 7 | 3769 | 295 | - | 3844 | - | |
| 1077 | 2475 | 8775 | 6005 | - | 26 | 9 | 3644 | 639 | - | 3861 | - | |
| 1089 | 2585 | 8423 | 6031 | - | 33 | 5 | 3510 | - | 1653 | - | 3646 | - |
| 1101 | 2695 | 8411 | 6279 | - | 46 | 2 | 3389 | - | 688 | - | 3732 | - |
| 1112 | 2796 | 8293 | 6445 | - | 59 | 3 | 3272 | - | 1641 | - | 3728 | - |
| 1124 | 2906 | 8207 | 6664 | - | 83 | 3 | 3149 | - | 2426 | - | 3763 | - |
| 1138 | 3016 | 7989 | 6838 | - | 119 | 2 | 2995 | - | 3386 | - | 3647 | - |

TWT 74 BLOW 33

2ND REDUCTION

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | L/D |
|------|-------|-----|-------|------|-----|-----|-----|-----|
| 880 | 1015 | 2 | 9852 | 2670 | 4 | 4 | 4 | 4 |
| 944 | 1240 | | 10356 | 2427 | - | 81 | - | 7 |
| 958 | 1370 | | 10276 | 2221 | - | 156 | - | 23 |
| 970 | 1481 | | 10446 | 2199 | - | 421 | - | 28 |
| 981 | 1584 | | 10344 | 2067 | - | 350 | - | 24 |
| 993 | 1697 | | 10645 | 2052 | - | 313 | - | 24 |
| 1004 | 1800 | | 10399 | 1943 | - | 268 | - | 24 |
| 1016 | 1912 | | 10538 | 1896 | - | 245 | - | 27 |
| 1028 | 2023 | | 10707 | 1789 | - | 184 | - | 27 |
| 1041 | 2141 | | 10445 | 1727 | - | 134 | - | 28 |
| 1053 | 2255 | | 10311 | 1758 | - | 101 | - | 15 |
| 1065 | 2363 | | 10374 | 1745 | - | 46 | - | 16 |
| 1077 | 2475 | | 10483 | 1780 | - | 54 | - | 12 |
| 1089 | 2585 | | 10210 | 1755 | - | 9 | - | 16 |
| 1101 | 2695 | | 10343 | 1785 | - | 110 | - | 19 |
| 1112 | 2796 | | 10347 | 1806 | - | 200 | - | 23 |
| 1124 | 2906 | | 10410 | 1838 | - | 127 | - | 23 |
| 1138 | 3016 | | 10343 | 1899 | - | 51 | - | 30 |

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Appendix "A"

TWT 74 BLOW 35

2ND REDUCTION

CONFIG E32T9C2

TUNNEL CONDITIONS

| | BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|------|-------|-----|------|------|-------|-------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | 1341 | 5201 | 36411 | 13666 | 5285 |
| 734 | 1018 | | 732 | 1341 | 5222 | 36875 | 13486 | 5273 | |
| 804 | 1255 | | 723 | 1340 | 5238 | 36887 | 13602 | 5271 | |
| 817 | 1368 | | 726 | 1348 | 5225 | 36944 | 13465 | 5271 | |
| 829 | 1476 | | 722 | 1340 | 5225 | 36944 | 13465 | 5271 | |
| 841 | 1584 | | 724 | 1343 | 5225 | 36863 | 13525 | 5269 | |
| 853 | 1690 | | 721 | 1337 | 5210 | 36838 | 13421 | 5268 | |
| 865 | 1796 | | 723 | 1340 | 5210 | 36781 | 13463 | 5264 | |
| 877 | 1901 | | 726 | 1346 | 5216 | 36745 | 13540 | 5261 | |
| 888 | 2000 | | 724 | 1342 | 5208 | 36745 | 13479 | 5259 | |
| 901 | 2115 | | 724 | 1343 | 5203 | 36692 | 13479 | 5256 | |
| 913 | 2222 | | 727 | 1346 | 5205 | 36635 | 13535 | 5256 | |
| 925 | 2324 | | 724 | 1343 | 5199 | 36680 | 13455 | 5251 | |
| 938 | 2439 | | 724 | 1342 | 5191 | 36615 | 13442 | 5247 | |
| 951 | 2552 | | 723 | 1340 | 5183 | 36582 | 13399 | 5244 | |
| 963 | 2657 | | 724 | 1341 | 5183 | 36558 | 13420 | 5245 | |
| 975 | 2764 | | 726 | 1343 | 5181 | 36488 | 13457 | 5242 | |
| 987 | 2866 | | 724 | 1338 | 5164 | 36435 | 13363 | 5237 | |
| 1001 | 2983 | | 722 | 1333 | 5154 | 36439 | 13283 | 5237 | |

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SID-62-627
Appendix "A"

TWT 74 BLOW 35

2ND REDUCTION

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|-----|------|----|------|-----|-------|-------|------|----------------------|
| 734 | 1018 | 2 | 8535 | 4 | 4025 | - | 16 | 10 | 4885 | 5394 - 4176 - 1966 |
| 804 | 1255 | | 8968 | | 4254 | - | 13 | 11 | 4578 | 5174 - 4582 - 1948 |
| 817 | 1368 | | 8959 | | 4290 | - | 22 | 14 | 4466 | 5406 - 4558 - 1916 |
| 829 | 1476 | | 9004 | | 4423 | - | 19 | 12 | 4370 | 7096 - 4705 - 1933 |
| 841 | 1584 | | 8830 | | 4496 | - | 25 | 11 | 4292 | 6178 - 4519 - 1930 |
| 853 | 1690 | | 8889 | | 4638 | - | 25 | 11 | 4183 | 5848 - 4548 - 1940 |
| 865 | 1796 | | 8820 | | 4698 | - | 23 | 8 | 4103 | 6976 - 4520 - 1928 |
| 877 | 1901 | | 8676 | | 4746 | - | 30 | 7 | 4022 | 13052 - 4380 - 1909 |
| 888 | 2000 | | 8595 | | 4855 | - | 33 | 10 | 3943 | 10513 - 4271 - 1914 |
| 901 | 2115 | | 8436 | | 4950 | - | 42 | 7 | 3824 | 13211 - 4243 - 1893 |
| 913 | 2222 | | 8333 | | 5112 | - | 39 | 4 | 3745 | 36754 - 4178 - 1914 |
| 925 | 2324 | | 8342 | | 5246 | - | 37 | | 3624 | -11295 - 4253 - 1901 |
| 938 | 2439 | | 8073 | | 5403 | - | 40 | - | 3512 | -10411 - 4121 - 1898 |
| 951 | 2552 | | 8097 | | 5539 | - | 1 | | 3425 | 3213 - 4157 - 1897 |
| 963 | 2657 | | 7895 | | 5663 | | 98 | 5 | 3276 | 3069 - 4061 - 1855 |
| 975 | 2764 | | 7780 | | 5814 | | 209 | 4 | 3140 | -4850 - 4011 - 1826 |
| 987 | 2866 | | 7586 | | 5914 | | 344 | 14 | 2949 | -4161 - 3851 - 1744 |
| 1001 | 2982 | | 7633 | | 6165 | | 523 | 18 | 2757 | -5878 - 3943 - 1700 |

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SID-62-627
Appendix "A"

TWT 74 BLOW 35
CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO
2ND REDUCTION

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|------|----|-----|-----|-----|-----|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 734 | 1018 | 9112 | 2452 | - | 377 | 65 | - | 17 | 7 |
| 804 | 1255 | 9678 | 2204 | - | 270 | 61 | - | 15 | 8 |
| 817 | 1368 | 9720 | 2049 | - | 228 | 92 | - | 25 | 9 |
| 829 | 1476 | 9833 | 1984 | - | 203 | 47 | - | 22 | 7 |
| 841 | 1584 | 9722 | 1916 | - | 185 | 80 | - | 27 | 4 |
| 853 | 1690 | 9854 | 1854 | - | 150 | 87 | - | 27 | 4 |
| 865 | 1796 | 9839 | 1751 | - | 122 | 59 | - | 25 | 4 |
| 877 | 1901 | 9749 | 1660 | - | 96 | 30 | - | 30 | 3 |
| 888 | 2000 | 9737 | 1623 | - | 72 | 44 | - | 35 | - |
| 901 | 2115 | 9654 | 1572 | - | 29 | 41 | - | 42 | - |
| 913 | 2222 | 9647 | 1582 | - | 6 | 12 | - | 38 | - |
| 925 | 2324 | 9735 | 1528 | - | 48 | 26 | - | 35 | - |
| 938 | 2439 | 9584 | 1587 | - | 87 | 30 | - | 36 | - |
| 951 | 2552 | 9694 | 1509 | - | 130 | 74 | - | 3 | 4 |
| 963 | 2657 | 9594 | 1532 | - | 200 | 161 | - | 85 | 49 |
| 975 | 2764 | 9590 | 1541 | - | 270 | 266 | - | 183 | 101 |
| 987 | 2866 | 9493 | 1551 | - | 374 | 479 | - | 295 | 177 |
| 1001 | 2983 | 9688 | 1552 | - | 495 | 588 | - | 445 | 276 |

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Appendix "A"

TWT 74 BLOW 36

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| | BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|------|-------|------|------|-------|-------|------|---|-----|
| DEC= | 2 | 2 | 3 | 3 | 2 | 1 | 1 | 1 | 1 |
| 798 | 1015 | 732 | 1345 | 5209 | 36485 | 13677 | 5278 | | |
| 883 | 1237 | 727 | 1352 | 5244 | 36888 | 13652 | 5269 | | |
| 899 | 1372 | 723 | 1341 | 5218 | 36860 | 13473 | 5266 | | |
| 911 | 1479 | 723 | 1343 | 5220 | 36860 | 13487 | 5264 | | |
| 923 | 1584 | 725 | 1345 | 5221 | 36782 | 13547 | 5264 | | |
| 936 | 1701 | 727 | 1350 | 5228 | 36794 | 13596 | 5259 | | |
| 947 | 1796 | 724 | 1342 | 5208 | 36754 | 13468 | 5259 | | |
| 959 | 1901 | 726 | 1345 | 5211 | 36709 | 13526 | 5257 | | |
| 971 | 2008 | 725 | 1344 | 5203 | 36668 | 13492 | 5254 | | |
| 983 | 2114 | 725 | 1343 | 5200 | 36656 | 13476 | 5254 | | |
| 996 | 2227 | 724 | 1342 | 5193 | 36619 | 13448 | 5251 | | |
| 1008 | 2334 | 726 | 1343 | 5189 | 36550 | 13471 | 5247 | | |
| 1022 | 2455 | 725 | 1341 | 5183 | 36542 | 13433 | 5245 | | |
| 1034 | 2559 | 728 | 1347 | 5188 | 36457 | 13532 | 5244 | | |
| 1046 | 2665 | 723 | 1337 | 5169 | 36489 | 13358 | 5242 | | |
| 1058 | 2769 | 725 | 1340 | 5169 | 36416 | 13413 | 5240 | | |
| 1070 | 2872 | 725 | 1340 | 5166 | 36404 | 13402 | 5237 | | |
| 1084 | 2987 | 723 | 1335 | 5153 | 36371 | 13323 | 5235 | | |

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TWT 74 BLOW 36

2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|------|-------|------|------|-----|------|------|-------|-------|-------|------|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 798 | 1015 | 7250 | 3331 | 8 | 4891 | 2856 | -4547 | - | 1629 | | |
| 883 | 1237 | 7285 | 3495 | 7 | 4587 | 4931 | -4416 | - | 1603 | | |
| 899 | 1372 | 7345 | 3593 | 18 | 8 | 4422 | 5263 | -4512 | - | 1589 | |
| 911 | 1479 | 7275 | 3724 | 20 | 8 | 4371 | 6894 | -4384 | - | 1628 | |
| 923 | 1584 | 7227 | 3806 | 15 | 6 | 4286 | 6589 | -4372 | - | 1631 | |
| 936 | 1701 | 7099 | 3971 | 23 | 4 | 4206 | 9056 | -4336 | - | 1670 | |
| 947 | 1796 | 6957 | 4043 | - | 28 | 6 | 4110 | 7430 | -4183 | - | 1662 |
| 959 | 1901 | 6762 | 4207 | - | 30 | 5 | 4017 | 10188 | -4091 | - | 1690 |
| 971 | 2008 | 6616 | 4329 | - | 28 | 2 | 3898 | 16261 | -4053 | - | 1687 |
| 983 | 2114 | 6674 | 4518 | - | 31 | 3832 | - | 4143 | - | 1731 | |
| 996 | 2227 | 6466 | 4679 | - | 28 | 3 | 3699 | -4406 | -4048 | - | 1731 |
| 1008 | 2334 | 6248 | 4814 | - | 35 | - | 3537 | -5306 | -3937 | - | 1702 |
| 1022 | 2455 | 5978 | 5035 | - | 21 | - | 5 | 3419 | -7385 | - | 1722 |
| 1034 | 2559 | 6011 | 5177 | 58 | 2 | 3364 | - | 2240 | -3926 | - | 1742 |
| 1046 | 2665 | 5781 | 5370 | 141 | 8 | 3239 | -3257 | -3877 | - | 1739 | |
| 1058 | 2769 | 5531 | 5526 | 275 | 11 | 3089 | -4536 | -3759 | - | 1707 | |
| 1070 | 2872 | 5622 | 5690 | 426 | 19 | 2910 | -4272 | -3877 | - | 1656 | |
| 1084 | 2987 | 5302 | 5912 | 584 | 22 | 2661 | -4906 | -3733 | - | 1573 | |

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Appendix "A"

TWT 74 BLOW 36

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|------|-----|-----|-----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 798 | 1015 | 7724 | 2000 | - | 305 | 27 | - | 1 | 8 |
| 883 | 1237 | 7865 | 1854 | - | 228 | 39 | - | 9 | 6 |
| 899 | 1372 | 7988 | 1748 | - | 182 | 81 | - | 20 | 4 |
| 911 | 1479 | 7985 | 1744 | - | 184 | 52 | - | 22 | 3 |
| 923 | 1584 | 7991 | 1688 | - | 165 | 42 | - | 16 | 2 |
| 936 | 1701 | 7950 | 1721 | - | 160 | 38 | - | 23 | - |
| 947 | 1796 | 7865 | 1701 | - | 136 | 63 | - | 28 | - |
| 959 | 1901 | 7763 | 1775 | - | 123 | 42 | - | 30 | - |
| 971 | 2008 | 7700 | 1794 | - | 91 | 21 | - | 27 | - |
| 983 | 2114 | 7854 | 1807 | - | 75 | 1 | - | 29 | - |
| 996 | 2227 | 7756 | 1880 | - | 35 | - | 38 | - | 12 |
| 1008 | 2334 | 7643 | 1945 | - | 24 | - | 42 | - | 13 |
| 1022 | 2455 | 7530 | 2096 | 60 | - | 20 | - | 17 | - |
| 1034 | 2559 | 7658 | 2073 | 84 | - | 111 | - | 52 | 27 |
| 1046 | 2665 | 7575 | 2207 | 135 | 225 | - | 122 | 71 | 2914 |
| 1058 | 2769 | 7465 | 2323 | 203 | 364 | 239 | - | 137 | 3112 |
| 1070 | 2872 | 7664 | 2289 | 308 | 584 | 364 | - | 222 | 2987 |
| 1084 | 2987 | 7541 | 2487 | 443 | 737 | 495 | - | 310 | 3297 |

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Appendix "A"

TWT 74 BLOW 37 2ND REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|-----|------|------|-------|----|-------|------|
| DEC= | 2 | 3 | 2 | 5182 | 36364 | 1 | 1 | 1 |
| 609 | 1017 | 730 | 1332 | 5227 | 36957 | 1 | 13553 | 5288 |
| 685 | 1239 | 724 | 1340 | 5227 | 36918 | 1 | 13539 | 5283 |
| 701 | 1377 | 723 | 1338 | 5227 | 36857 | 1 | 13494 | 5283 |
| 712 | 1475 | 724 | 1341 | 5225 | 36857 | 1 | 13528 | 5278 |
| 723 | 1574 | 724 | 1340 | 5224 | 36857 | 1 | 13522 | 5278 |
| 735 | 1680 | 724 | 1341 | 5223 | 36857 | 1 | 13514 | 5275 |
| 748 | 1796 | 722 | 1336 | 5209 | 36816 | 1 | 13430 | 5271 |
| 760 | 1908 | 722 | 1337 | 5210 | 36812 | 1 | 13444 | 5271 |
| 772 | 2015 | 722 | 1336 | 5202 | 36747 | 1 | 13426 | 5269 |
| 784 | 2119 | 723 | 1339 | 5208 | 36775 | 1 | 13455 | 5266 |
| 796 | 2226 | 723 | 1337 | 5197 | 36694 | 1 | 13432 | 5264 |
| 808 | 2334 | 723 | 1337 | 5197 | 36686 | 1 | 13432 | 5264 |
| 820 | 2443 | 723 | 1337 | 5192 | 36657 | 1 | 13414 | 5261 |
| 832 | 2548 | 723 | 1335 | 5184 | 36596 | 1 | 13398 | 5259 |
| 845 | 2664 | 723 | 1335 | 5183 | 36604 | 1 | 13387 | 5257 |
| 857 | 2770 | 723 | 1334 | 5175 | 36531 | 1 | 13374 | 5256 |
| 869 | 2877 | 724 | 1335 | 5170 | 36474 | 1 | 13380 | 5251 |
| 882 | 2982 | 722 | 1331 | 5160 | 36462 | 1 | 13309 | 5251 |

TWT 74 BLOW 37 2ND REDUCTION

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA, PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|------|------|-----|-----|-----|-------|--------|-----|-------------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 609 | 1017 | 7919 | 3995 | - | 25 | 9 | 5960 | 7361 | - | 3810 - 2381 |
| 685 | 1239 | 8247 | 4320 | - | 18 | 9 | 5529 | 6372 | - | 4113 - 2388 |
| 701 | 1377 | 8405 | 4493 | - | 10 | 9 | 5304 | 6166 | - | 4413 - 2383 |
| 712 | 1475 | 8491 | 4540 | - | 20 | 10 | 5134 | 6128 | - | 4491 - 2331 |
| 723 | 1574 | 8595 | 4618 | - | 22 | 11 | 4963 | 7260 | - | 4593 - 2292 |
| 735 | 1680 | 8746 | 4660 | - | 26 | 12 | 4772 | 7482 | - | 4543 - 2224 |
| 748 | 1796 | 8671 | 4794 | - | 29 | 15 | 4630 | 7017 | - | 4541 - 2220 |
| 760 | 1908 | 8612 | 4917 | - | 42 | 13 | 4531 | 9919 | - | 4527 - 2228 |
| 772 | 2015 | 8480 | 5010 | - | 40 | 12 | 4388 | 10021 | - | 4467 - 2198 |
| 784 | 2119 | 8445 | 5159 | - | 39 | 9 | 4314 | 13515 | - | 4437 - 2226 |
| 796 | 2226 | 8255 | 5213 | - | 50 | 9 | 4184 | 34218 | - | 4320 - 2181 |
| 808 | 2334 | 8214 | 5315 | - | 63 | 9 | 4075 | 32595 | - | 4249 - 2166 |
| 820 | 2443 | 8082 | 5405 | - | 77 | 5 | 3966 | -11647 | - | 4151 - 2144 |
| 832 | 2548 | 7949 | 5619 | - | 66 | 9 | 3853 | -27368 | - | 4104 - 2165 |
| 845 | 2664 | 7801 | 5741 | - | 31 | 8 | 3693 | 9744 | - | 4019 - 2120 |
| 857 | 2770 | 7786 | 5864 | 35 | 7 | 7 | 3571 | -3400 | - | 4045 - 2094 |
| 869 | 2877 | 7619 | 6009 | 122 | 4 | 4 | 3397 | -4252 | - | 4024 - 2041 |
| 882 | 2982 | 7531 | 6192 | 17 | - | 25 | 3207 | 16076 | - | 4025 - 1986 |

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Appendix "A"

TWT 74 BLOW 37

CONFIG E25T9C2

2ND REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|------|-----|-----|-----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 609 | 1017 | 8500 | 2533 | - | 827 | 58 | - | 27 | 5 |
| 685 | 1239 | 8982 | 2450 | - | 723 | 53 | - | 19 | 5 |
| 701 | 1377 | 9233 | 2363 | - | 658 | 32 | - | 12 | 6 |
| 712 | 1475 | 9367 | 2229 | - | 588 | 64 | - | 22 | 5 |
| 723 | 1574 | 9526 | 2113 | - | 521 | 52 | - | 24 | 5 |
| 735 | 1680 | 9719 | 1934 | - | 433 | 58 | - | 28 | 4 |
| 748 | 1796 | 9727 | 1887 | - | 392 | 72 | - | 32 | 5 |
| 760 | 1908 | 9746 | 1832 | - | 366 | 60 | - | 43 | 2 |
| 772 | 2015 | 9687 | 1782 | - | 314 | 57 | - | 42 | 2 |
| 784 | 2119 | 9739 | 1758 | - | 298 | 37 | - | 39 | 6 |
| 796 | 2226 | 9614 | 1696 | - | 246 | 16 | - | 50 | 11 |
| 808 | 2334 | 9648 | 1626 | - | 201 | 21 | - | 61 | 16 |
| 820 | 2443 | 9594 | 1580 | - | 158 | 53 | - | 72 | 27 |
| 832 | 2548 | 9593 | 1653 | - | 120 | 22 | - | 64 | 20 |
| 845 | 2664 | 9547 | 1634 | - | 45 | 47 | - | 32 | 7 |
| 857 | 2770 | 9620 | 1573 | - | 17 | 54 | - | 27 | 23 |
| 869 | 2877 | 9571 | 1601 | 107 | 168 | 105 | - | 62 | 1672 |
| 882 | 2982 | 9613 | 1628 | 213 | - | 13 | 27 | - | 13 |

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TWT 74 BLOW 38

2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| DEC= | BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|------|-------|-----|------|------|------|-------|-------|------|
| 745 | 1021 | 2 | 2 | 725 | 1326 | 5175 | 36484 | 1 | 1 |
| 810 | 1239 | | | 724 | 1340 | 5229 | 36891 | 13411 | 5285 |
| 826 | 1380 | | | 728 | 1348 | 5243 | 36859 | 13530 | 5283 |
| 839 | 1499 | | | 723 | 1338 | 5218 | 36846 | 13482 | 5278 |
| 850 | 1598 | | | 727 | 1346 | 5231 | 36785 | 13624 | 5278 |
| 863 | 1713 | | | 724 | 1339 | 5220 | 36822 | 13514 | 5278 |
| 876 | 1831 | | | 724 | 1339 | 5216 | 36793 | 13499 | 5275 |
| 888 | 1940 | | | 725 | 1341 | 5214 | 36745 | 13524 | 5273 |
| 899 | 2038 | | | 725 | 1341 | 5214 | 36761 | 13512 | 5271 |
| 911 | 2146 | | | 726 | 1339 | 5203 | 36647 | 13507 | 5271 |
| 924 | 2263 | | | 724 | 1336 | 5197 | 36671 | 13442 | 5268 |
| 937 | 2378 | | | 725 | 1340 | 5201 | 36655 | 13490 | 5266 |
| 948 | 2475 | | | 725 | 1338 | 5194 | 36610 | 13470 | 5264 |
| 960 | 2580 | | | 725 | 1339 | 5191 | 36574 | 13472 | 5263 |
| 972 | 2686 | | | 727 | 1342 | 5193 | 36517 | 13528 | 5261 |
| 984 | 2793 | | | 724 | 1335 | 5178 | 36517 | 13415 | 5259 |
| 996 | 2897 | | | 726 | 1338 | 5183 | 36496 | 13468 | 5259 |
| 1010 | 3010 | | | 724 | 1336 | 5174 | 36492 | 13399 | 5254 |

TWT 74 BLOW 38 2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) /Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|------|-----|-----|-----|-------|--------|-------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 745 | 1021 | 8139 | 3529 | - | 9 | 10 | 5180 | 4271 | -4378 | -1828 |
| 810 | 1239 | 8456 | 3782 | - | 16 | 14 | 4909 | 4884 | -4658 | -1857 |
| 826 | 1380 | 8336 | 3823 | - | 20 | 13 | 4722 | 5031 | -4547 | -1805 |
| 839 | 1499 | 8386 | 4013 | - | 18 | 11 | 4642 | 5591 | -4530 | -1863 |
| 850 | 1598 | 8211 | 4029 | - | 13 | 12 | 4544 | 4520 | -4455 | -1831 |
| 863 | 1713 | 8231 | 4213 | - | 11 | 11 | 4404 | 4644 | -4518 | -1855 |
| 876 | 1831 | 8056 | 4326 | - | 11 | 12 | 4209 | 4117 | -4356 | -1821 |
| 888 | 1940 | 7922 | 4518 | - | 19 | 10 | 4096 | 5018 | -4329 | -1851 |
| 899 | 2038 | 7797 | 4645 | - | 17 | 9 | 3985 | 4926 | -4240 | -1851 |
| 911 | 2146 | 7624 | 4735 | - | 25 | 10 | 3861 | 5617 | -4098 | -1828 |
| 924 | 2263 | 7535 | 4885 | - | 26 | 5 | 3741 | 11306 | -4024 | -1828 |
| 937 | 2378 | 7486 | 5007 | - | 49 | 6 | 3649 | 12159 | -4115 | -1827 |
| 948 | 2475 | 7336 | 5123 | - | 67 | 2 | 3553 | -19777 | -3976 | -1820 |
| 960 | 2580 | 7198 | 5282 | - | 76 | - | 3446 | -28196 | -3943 | -1820 |
| 972 | 2686 | 7101 | 5449 | 53 | 2 | | 3353 | -1865 | -3931 | -1827 |
| 984 | 2793 | 7089 | 5701 | 219 | 10 | | 3208 | -4021 | -4094 | -1829 |
| 996 | 2897 | 6852 | 5840 | 340 | 11 | | 3033 | -5199 | -4027 | -1772 |
| 1010 | 3010 | 6626 | 6100 | 308 | 11 | | 2880 | -12648 | -3915 | -1756 |

TWT 74 BLOW 38

2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|------|------|-----|-----|-----|------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 745 | 1021 | 8636 | 2030 | -405 | 73 | -11 | 8 | 2351 | |
| 810 | 1239 | 9071 | 1880 | -344 | 85 | -18 | 10 | 2073 | |
| 826 | 1380 | 9007 | 1725 | -285 | 98 | -22 | 8 | 1915 | |
| 839 | 1499 | 9138 | 1708 | -283 | 71 | -21 | 6 | 1869 | |
| 850 | 1598 | 9003 | 1613 | -254 | 86 | -16 | 8 | 1791 | |
| 863 | 1713 | 9107 | 1603 | -222 | 66 | -14 | 8 | 1760 | |
| 876 | 1831 | 9007 | 1576 | -161 | 97 | -14 | 8 | 1750 | |
| 888 | 1940 | 8973 | 1631 | -139 | 93 | -21 | 3 | 1818 | |
| 899 | 2038 | 8926 | 1639 | -107 | 90 | -19 | 3 | 1836 | |
| 911 | 2146 | 8828 | 1618 | -64 | 96 | -27 | | 1833 | |
| 924 | 2263 | 8834 | 1610 | -23 | 32 | -26 | 6 | 1822 | |
| 937 | 2378 | 8869 | 1563 | -13 | 53 | -47 | 14 | 1762 | |
| 948 | 2475 | 8807 | 1582 | -48 | -29 | -62 | 26 | 1796 | |
| 960 | 2580 | 8779 | 1623 | 90 | -24 | -68 | 34 | 1849 | |
| 972 | 2686 | 8797 | 1652 | 129 | 108 | 47 | 25 | 1878 | |
| 984 | 2793 | 8934 | 1716 | 203 | 311 | 189 | 111 | 1920 | |
| 996 | 2897 | 8823 | 1790 | 291 | 414 | 292 | 175 | 2029 | |
| 1010 | 3010 | 8792 | 1954 | 375 | 196 | 260 | 164 | 2222 | |

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Appendix "A"

TWT 74 BLOW 39

2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|------|------|------|-------|-------|------|-----|
| DEC# | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 535 | 1011 | 1194 | 1431 | 4694 | 19466 | 5266 | | |
| 607 | 1234 | 1184 | 1429 | 4682 | 19709 | 19346 | 5259 | |
| 623 | 1377 | 1184 | 1429 | 4681 | 19701 | 19345 | 5259 | |
| 635 | 1485 | 1184 | 1429 | 4681 | 19701 | 19345 | 5259 | |
| 647 | 1593 | 1184 | 1429 | 4679 | 19709 | 19330 | 5256 | |
| 659 | 1702 | 1184 | 1428 | 4676 | 19685 | 19322 | 5256 | |
| 670 | 1807 | 1183 | 1425 | 4664 | 19672 | 19257 | 5254 | |
| 681 | 1909 | 1183 | 1425 | 4659 | 19636 | 19245 | 5251 | |
| 693 | 2021 | 1185 | 1429 | 4671 | 19644 | 19308 | 5251 | |
| 705 | 2132 | 1183 | 1425 | 4656 | 19627 | 19232 | 5247 | |
| 717 | 2242 | 1183 | 1423 | 4645 | 19578 | 19187 | 5245 | |
| 730 | 2360 | 1184 | 1427 | 4656 | 19599 | 19241 | 5244 | |
| 741 | 2461 | 1183 | 1426 | 4647 | 19599 | 19191 | 5237 | |
| 752 | 2562 | 1184 | 1427 | 4650 | 19583 | 19211 | 5239 | |
| 764 | 2672 | 1183 | 1425 | 4646 | 19599 | 19185 | 5239 | |
| 776 | 2781 | 1181 | 1424 | 4639 | 19603 | 19147 | 5237 | |
| 788 | 2890 | 1182 | 1425 | 4643 | 19591 | 19169 | 5235 | |
| 800 | 2999 | 1180 | 1421 | 4624 | 19578 | 19072 | 5230 | |

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SID-62-627
Appendix "A"

TWT 74 BLOW 39 2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | DEC= | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|------|-------|------|----|----|-----|------|-------|-------|------|------|
| 535 | 1011 | 9340 | 3853 | - | 41 | 16 | 5529 | 5098 | - | 3574 | - |
| 607 | 1234 | 9435 | 4097 | - | 41 | 16 | 5121 | 5122 | - | 3582 | - |
| 623 | 1377 | 9418 | 4233 | - | 39 | 14 | 4922 | 5919 | - | 3554 | - |
| 635 | 1485 | 9713 | 4375 | - | 31 | 12 | 4856 | 6201 | - | 3582 | - |
| 647 | 1593 | 9510 | 4410 | - | 26 | 10 | 4741 | 6624 | - | 3536 | - |
| 659 | 1702 | 9783 | 4565 | - | 19 | 12 | 4490 | 4922 | - | 3431 | - |
| 670 | 1807 | 9564 | 4724 | - | 20 | 10 | 4215 | 5115 | - | 3387 | - |
| 681 | 1909 | 9335 | 4868 | - | 21 | 7 | 4025 | 5707 | - | 3292 | - |
| 693 | 2021 | 9323 | 5089 | - | 17 | 8 | 3811 | 5845 | - | 3244 | - |
| 705 | 2132 | 9046 | 5255 | - | 3 | 6 | 3576 | 2134 | - | 3162 | - |
| 717 | 2242 | 9255 | 5521 | - | 2 | 3 | 3414 | 515 | - | 3115 | - |
| 730 | 2360 | 9007 | 5799 | - | 33 | 2 | 3246 | 9961 | - | 3146 | - |
| 741 | 2461 | 9349 | 6150 | - | 28 | 1 | 3175 | 5418 | - | 3133 | - |
| 752 | 2562 | 9005 | 6263 | - | 33 | - | 1 | 3023 | - | 3142 | - |
| 764 | 2672 | 8633 | 6361 | - | 39 | 2 | 2862 | 7740 | - | 3180 | - |
| 776 | 2781 | 8115 | 6493 | - | 39 | 1 | 2671 | 2219 | - | 3229 | - |
| 788 | 2890 | 7740 | 6712 | - | 22 | 3 | 2487 | 112 | - | 3182 | - |
| 800 | 2999 | 8189 | 7216 | - | 4 | - | 2369 | 2091 | - | 3188 | - |
| | | | | | | 6 | | | | | 1709 |

TWT 74 BLOW 39 2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| DEC | BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|-----|------|-------|-----|----|------|-----|-----|-----|-----|------|
| 535 | 2 | 9871 | 2 | 4 | 2154 | - | 557 | 4 | 4 | 4 |
| 535 | 1011 | 10092 | 1 | 4 | 1985 | - | 447 | 193 | - | 2182 |
| 607 | 1234 | 10155 | 1 | 4 | 1871 | - | 392 | 136 | - | 1967 |
| 623 | 1377 | 10510 | 1 | 4 | 1739 | - | 377 | 98 | - | 1842 |
| 635 | 1485 | 10355 | 1 | 4 | 1630 | - | 342 | 72 | - | 1655 |
| 647 | 1593 | 10690 | 1 | 4 | 1502 | - | 242 | 98 | - | 1574 |
| 659 | 1702 | 10558 | 1 | 4 | 1525 | - | 145 | 93 | - | 1405 |
| 670 | 1807 | 10414 | 1 | 4 | 1547 | - | 80 | 77 | - | 4 |
| 681 | 1909 | 10507 | 1 | 4 | 1555 | - | 58 | - | 22 | 1444 |
| 693 | 2021 | 10338 | 1 | 4 | 1606 | - | 104 | 35 | - | 1486 |
| 705 | 2132 | 10661 | 1 | 4 | 1575 | - | 188 | 6 | - | 7 |
| 717 | 2242 | 10575 | 1 | 4 | 1709 | - | 263 | 35 | - | 1554 |
| 730 | 2360 | 11061 | 1 | 4 | 1697 | - | 314 | 33 | - | 1477 |
| 741 | 2461 | 10828 | 1 | 4 | 1753 | - | 392 | 29 | - | 1619 |
| 752 | 2562 | 10571 | 1 | 4 | 1799 | - | 478 | 37 | - | 1702 |
| 764 | 2672 | 10207 | 1 | 4 | 1958 | - | 581 | 75 | - | 1616 |
| 776 | 2781 | 10019 | 1 | 4 | 2136 | - | 696 | 74 | - | 1534 |
| 788 | 2890 | 10699 | 1 | 4 | 2157 | - | 828 | 40 | - | 8 |
| 800 | 2999 | - | - | - | - | - | - | 6 | - | 2132 |
| | | | | | | | | - | 3 | 2016 |

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SID-62-627
Appendix "A"

TWT 74 BLOW 40

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|--------|-------|------|------|------|-------|-------|-------|------|
| DEC= 2 | 2 | 3 | 2 | 1427 | 4699 | 19349 | 19541 | 5281 |
| 570 | 1006 | 1201 | 1428 | 4701 | 19574 | 19487 | 5280 | |
| 632 | 1230 | 1193 | 1428 | 4687 | 19598 | 19407 | 5280 | |
| 648 | 1373 | 1189 | 1424 | 4675 | 19582 | 19345 | 5278 | |
| 660 | 1486 | 1188 | 1420 | 4677 | 19566 | 19361 | 5278 | |
| 672 | 1597 | 1189 | 1421 | 4679 | 19553 | 19376 | 5276 | |
| 683 | 1696 | 1190 | 1422 | 4670 | 19549 | 19326 | 5273 | |
| 695 | 1811 | 1188 | 1420 | 4675 | 19513 | 19365 | 5275 | |
| 707 | 1922 | 1191 | 1422 | 4684 | 19513 | 19417 | 5271 | |
| 720 | 2043 | 1192 | 1426 | 4670 | 19480 | 19346 | 5271 | |
| 733 | 2161 | 1191 | 1421 | 4671 | 19460 | 19362 | 5269 | |
| 746 | 2283 | 1192 | 1422 | 4664 | 19472 | 19318 | 5266 | |
| 758 | 2392 | 1190 | 1421 | 4661 | 19464 | 19303 | 5264 | |
| 770 | 2503 | 1190 | 1421 | 4647 | 19451 | 19236 | 5263 | |
| 781 | 2607 | 1189 | 1417 | 4647 | 19431 | 19240 | 5261 | |
| 793 | 2717 | 1189 | 1418 | 4643 | 19496 | 19294 | 5259 | |
| 806 | 2837 | 1189 | 1423 | 4661 | 19476 | 19204 | 5257 | |
| 818 | 2945 | 1187 | 1418 | | | | | |

TWT 74 BLOW 40

2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|------|------|----|-----|-----|-------|-------|-------|---------------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 570 | 1006 | 8002 | 3325 | - | 81 | 13 | 5789 | 10149 | - | 3401 - 1925 |
| 632 | 1230 | 8764 | 3799 | - | 23 | 9 | 5312 | 6400 | - | 3485 - 2018 |
| 648 | 1373 | 8959 | 3910 | - | 17 | 8 | 4956 | 6646 | - | 3487 - 1938 |
| 660 | 1486 | 9028 | 4070 | - | 19 | 8 | 4703 | 6147 | - | 3408 - 1914 |
| 672 | 1597 | 8790 | 4104 | - | 22 | 11 | 4466 | 7297 | - | 3364 - 1833 |
| 683 | 1696 | 8478 | 4156 | - | 21 | 8 | 4303 | 7349 | - | 3335 - 1788 |
| 695 | 1811 | 8586 | 4382 | - | 12 | 7 | 4093 | 7499 | - | 3280 - 1793 |
| 707 | 1922 | 8507 | 4514 | - | 10 | 6 | 3845 | 7472 | - | 3209 - 1736 |
| 720 | 2043 | 8383 | 4705 | - | 7 | 2 | 3602 | 5750 | - | 3148 - 1695 |
| 733 | 2161 | 8472 | 5009 | - | 2 | | 3401 | 4024 | - | 3061 - 1704 |
| 746 | 2283 | 8287 | 5206 | - | 4 | - | 2 | 3208 | - | 3048 - 1670 |
| 758 | 2392 | 8196 | 5446 | - | 3 | - | 3 | 3021 | 2104 | - 2996 - 1645 |
| 770 | 2503 | 7839 | 5588 | - | 8 | - | 9 | 2831 | 4964 | - 3059 - 1582 |
| 781 | 2607 | 7730 | 5815 | - | 14 | - | 7 | 2669 | 7245 | - 3059 - 1552 |
| 793 | 2717 | 7653 | 6069 | - | 21 | - | 8 | 2526 | 29678 | - 3060 - 1533 |
| 806 | 2837 | 7665 | 6338 | - | 5 | - | 7 | 2361 | 4037 | - 3078 - 1496 |
| 818 | 2945 | 8055 | 6776 | - | 27 | - | 14 | 2279 | 820 | - 3106 - 1544 |

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Appendix "A"

TWT 74 BLOW 40

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|-----|-----|-----|-----|------|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 570 | 1006 | 8459 | 1877 | 570 | 114 | -82 | - | 2 | 2219 |
| 632 | 1230 | 9372 | 1845 | 487 | 69 | -25 | 4 | 1969 | |
| 648 | 1373 | 9631 | 1671 | 364 | 47 | -19 | 4 | 1735 | |
| 660 | 1486 | 9770 | 1619 | 289 | 62 | -21 | 3 | 1657 | |
| 672 | 1597 | 9580 | 1527 | 208 | 52 | -24 | 4 | 1594 | |
| 683 | 1696 | 9322 | 1501 | 162 | 49 | -23 | 2 | 1610 | |
| 695 | 1811 | 9522 | 1496 | 94 | 26 | -13 | 3 | 1571 | |
| 707 | 1922 | 9519 | 1461 | 93 | 22 | -11 | 3 | 1535 | |
| 720 | 2043 | 9498 | 1483 | 93 | 8 | -7 | | 1562 | |
| 733 | 2161 | 9722 | 1537 | 180 | -19 | 2 | 1 | 1581 | |
| 746 | 2283 | 9657 | 1583 | 265 | - | 3 | 3 | 1639 | |
| 758 | 2392 | 9700 | 1655 | 358 | 30 | -1 | 4 | 1706 | |
| 770 | 2503 | 9467 | 1746 | 448 | 40 | 11 | 5 | 1844 | |
| 781 | 2607 | 9499 | 1826 | 542 | 33 | 16 | | 1922 | |
| 793 | 2717 | 9580 | 1906 | 634 | 8 | 23 | 2 | 1989 | |
| 806 | 2837 | 9756 | 1934 | 753 | 47 | 7 | 4 | 1982 | |
| 818 | 2945 | 10346 | 1939 | 854 | 122 | -16 | -26 | 1875 | |

TWT 74 BLOW 41

2ND REDUCTION

CONFIG E25T9C2

TUNNEL CONDITIONS

| | BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TTO |
|------|------|-------|------|------|-------|-------|------|---|-----|
| DEC= | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 729 | 1004 | 1191 | 1410 | 4647 | 19396 | 19252 | 5283 | | |
| 806 | 1226 | 1186 | 1422 | 4688 | 19685 | 19384 | 5285 | | |
| 823 | 1373 | 1186 | 1421 | 4684 | 19685 | 19366 | 5283 | | |
| 835 | 1480 | 1186 | 1422 | 4687 | 19689 | 19378 | 5283 | | |
| 847 | 1592 | 1183 | 1419 | 4676 | 19706 | 19314 | 5283 | | |
| 859 | 1698 | 1184 | 1422 | 4685 | 19722 | 19357 | 5280 | | |
| 871 | 1809 | 1183 | 1419 | 4672 | 19702 | 19296 | 5280 | | |
| 883 | 1921 | 1184 | 1421 | 4677 | 19689 | 19323 | 5278 | | |
| 895 | 2036 | 1182 | 1416 | 4663 | 19685 | 19251 | 5278 | | |
| 907 | 2145 | 1184 | 1419 | 4667 | 19661 | 19281 | 5275 | | |
| 918 | 2249 | 1185 | 1422 | 4672 | 19653 | 19307 | 5271 | | |
| 931 | 2367 | 1183 | 1418 | 4659 | 19653 | 19238 | 5271 | | |
| 943 | 2478 | 1184 | 1419 | 4661 | 19636 | 19254 | 5269 | | |
| 955 | 2586 | 1182 | 1419 | 4661 | 19665 | 19244 | 5269 | | |
| 968 | 2706 | 1180 | 1417 | 4649 | 19669 | 19177 | 5264 | | |
| 982 | 2829 | 1180 | 1418 | 4651 | 19681 | 19188 | 5263 | | |
| 995 | 2947 | 1178 | 1414 | 4637 | 19681 | 19112 | 5261 | | |
| 1017 | 3082 | 1176 | 1414 | 4630 | 19702 | 19067 | 5256 | | |

TWT 74 BLOW 41

CONFIG E25T9C2

2ND REDUCTION

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | PBC |
|------|-------|------|------|----|-----|------|----------------------|---------------------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 729 | 1004 | 9192 | 4023 | - | 26 | 10 | 6309 | 7351 - 3307 - 2538 |
| 806 | 1226 | 9298 | 4384 | - | 33 | 11 | 6004 | 8985 - 3409 - 2632 |
| 823 | 1373 | 9723 | 4726 | - | 18 | 12 | 5762 | 4644 - 3453 - 2723 |
| 835 | 1480 | 9571 | 4768 | - | 12 | 13 | 5647 | 4279 - 3466 - 2693 |
| 847 | 1592 | 9356 | 4815 | - | 21 | 14 | 5468 | 4751 - 3498 - 2633 |
| 859 | 1698 | 9613 | 5012 | - | 19 | 13 | 5221 | 4682 - 3494 - 2617 |
| 871 | 1809 | 9781 | 5194 | - | 21 | 13 | 4939 | 5862 - 3437 - 2565 |
| 883 | 1921 | 9546 | 5271 | - | 31 | 13 | 4614 | 7554 - 3361 - 2432 |
| 895 | 2036 | 9603 | 5514 | - | 27 | 14 | 4310 | 7423 - 3297 - 2376 |
| 907 | 2145 | 9338 | 5717 | 32 | 16 | 16 | 4062 | 4113 - 3238 - 2322 |
| 918 | 2249 | 9115 | 5834 | 6 | 12 | 3901 | 2369 - 3193 - 2276 | |
| 931 | 2367 | 9383 | 6182 | 9 | 10 | 3740 | 1671 - 3167 - 2312 | |
| 943 | 2478 | 8925 | 6218 | 25 | 8 | 3557 | 2991 - 3119 - 2212 | |
| 955 | 2586 | 9341 | 6595 | 30 | 5 | 3437 | 6962 - 3128 - 2267 | |
| 968 | 2706 | 9361 | 6842 | 47 | 2 | 3284 | 11791 - 3128 - 2247 | |
| 982 | 2829 | 9197 | 7005 | 39 | 3 | 3077 | -56287 - 3133 - 2156 | |
| 995 | 2947 | 8871 | 7159 | 36 | - | 2 | 2842 | 18198 - 3178 - 2035 |
| 1017 | 3082 | 8819 | 7538 | 26 | - | 7 | 2583 | 15347 - 3238 - 1947 |

TWT 74 BLOW 41
CONFIG E25T9C2

2ND REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|-----|-----|-----|-----|------|------|
| 729 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 806 | 1004 | 9753 | 2359 | - | 920 | 60 | - | 27 | 6 |
| 806 | 1226 | 10017 | 2310 | - | 901 | 55 | - | 34 | 4 |
| 823 | 1373 | 10567 | 2282 | - | 870 | 112 | - | 21 | 7 |
| 835 | 1480 | 10471 | 2165 | - | 833 | 98 | - | 15 | 9 |
| 847 | 1592 | 10318 | 2064 | - | 769 | 120 | - | 24 | 8 |
| 859 | 1698 | 10658 | 1987 | - | 682 | 115 | - | 22 | 7 |
| 871 | 1809 | 10911 | 1900 | - | 568 | 74 | - | 24 | 6 |
| 883 | 1921 | 10748 | 1836 | - | 422 | 67 | - | 33 | 2 |
| 895 | 2036 | 10921 | 1829 | - | 291 | 60 | - | 30 | 4 |
| 907 | 2145 | 10782 | 1905 | - | 187 | 123 | - | 24 | 27 |
| 918 | 2249 | 10653 | 1904 | - | 115 | 87 | 1 | 13 | 1787 |
| 931 | 2367 | 11076 | 1896 | - | 35 | 63 | 4 | 12 | 1712 |
| 943 | 2478 | 10710 | 1904 | 56 | 41 | 19 | 17 | 1778 | |
| 955 | 2586 | 11283 | 1860 | 134 | 30 | 24 | 18 | 1648 | |
| 968 | 2706 | 11449 | 1834 | 229 | 32 | 41 | 23 | 1602 | |
| 982 | 2829 | 11418 | 1808 | 362 | 7 | 33 | 21 | 1584 | |
| 995 | 2947 | 11245 | 1868 | 515 | - | 24 | 32 | 16 | 1661 |
| 1017 | 3082 | 11435 | 1956 | 714 | - | 21 | 25 | 7 | 1710 |

CONT'D
ENTIA
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TWT 74 BLOW 42

2ND REDUCTION

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TT0 |
|-----|-------|-----|------|------|------|-------|-------|------|
| 594 | 1009 | 2 | 3 | 1432 | 4743 | 19867 | 1 | 1 |
| 669 | 1244 | | 1188 | 1415 | 4684 | 19785 | 19334 | 5298 |
| 683 | 1370 | | 1182 | 1414 | 4681 | 19793 | 19316 | 5298 |
| 694 | 1473 | | 1179 | 1411 | 4668 | 19785 | 19249 | 5297 |
| 706 | 1586 | | 1181 | 1413 | 4672 | 19760 | 19278 | 5295 |
| 720 | 1714 | | 1181 | 1411 | 4665 | 19712 | 19252 | 5293 |
| 733 | 1833 | | 1182 | 1412 | 4667 | 19703 | 19267 | 5293 |
| 745 | 1948 | | 1182 | 1415 | 4672 | 19716 | 19292 | 5290 |
| 757 | 2060 | | 1180 | 1411 | 4659 | 19707 | 19223 | 5288 |
| 768 | 2161 | | 1182 | 1414 | 4663 | 19687 | 19248 | 5285 |
| 779 | 2261 | | 1181 | 1417 | 4664 | 19703 | 19249 | 5278 |
| 791 | 2373 | | 1180 | 1407 | 4639 | 19638 | 19136 | 5283 |
| 802 | 2473 | | 1181 | 1411 | 4651 | 19650 | 19194 | 5281 |
| 815 | 2592 | | 1180 | 1413 | 4654 | 19695 | 19196 | 5280 |
| 827 | 2701 | | 1179 | 1413 | 4652 | 19724 | 19177 | 5276 |
| 839 | 2808 | | 1176 | 1409 | 4635 | 19712 | 19093 | 5275 |
| 851 | 2920 | | 1176 | 1408 | 4629 | 19691 | 19066 | 5271 |
| 865 | 3035 | | 1175 | 1406 | 4624 | 19687 | 19038 | 5271 |

TWT 74 BLOW 42 2ND REDUCTION

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|-------|------|-----|-----|------|--------|--------|-------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 594 | 1009 | 10089 | 4298 | - | 30 | 9 | 5457 | 11101 | -3662 | -2345 |
| 669 | 1244 | 10019 | 4417 | - | 40 | 7 | 5041 | 22342 | -3708 | -2227 |
| 683 | 1370 | 10146 | 4588 | - | 39 | 8 | 4784 | 11295 | -3683 | -2195 |
| 694 | 1473 | 9855 | 4642 | - | 47 | 8 | 4608 | 15407 | -3659 | -2199 |
| 706 | 1586 | 10072 | 4927 | - | 48 | 10 | 4421 | 11535 | -3591 | -2178 |
| 720 | 1714 | 9543 | 4914 | - | 33 | 12 | 4408 | 9596 | -3456 | -2166 |
| 733 | 1833 | 9610 | 5134 | - | 28 | 12 | 4234 | 7913 | -3367 | -2174 |
| 745 | 1948 | 9573 | 5359 | 9 | 8 | 3933 | 1236 | -3328 | -2108 | |
| 757 | 2060 | 9718 | 5672 | 72 | 8 | 3669 | 5618 | -3319 | -2081 | |
| 768 | 2161 | 9503 | 5791 | 92 | 6 | 3501 | -13419 | -3209 | -2028 | |
| 779 | 2261 | 9437 | 5949 | 103 | 6 | 3379 | -12865 | -3193 | -2010 | |
| 791 | 2373 | 9229 | 6055 | 53 | 5 | 3266 | -6780 | -3103 | -1978 | |
| 802 | 2473 | 9392 | 6280 | 68 | | 3126 | -48122 | -3109 | -1963 | |
| 815 | 2592 | 9751 | 6626 | 60 | - | 1 | 2986 | -20530 | -3132 | -1979 |
| 827 | 2701 | 9655 | 6822 | 30 | - | 7 | 2863 | 21311 | -3162 | -1953 |
| 839 | 2808 | 8931 | 6793 | 36 | - | 6 | 2681 | 9259 | -3219 | -1821 |
| 851 | 2920 | 9637 | 7329 | 38 | - | 10 | 2584 | 14463 | -3251 | -1894 |
| 865 | 3035 | 9302 | 7571 | 31 | - | 8 | 2352 | -20071 | -3245 | -1780 |

TWT 74 BLOW 42

2ND REDUCTION

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| | BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|------|-------|------|-----|----|-----|----|-----|------|------|
| DEC= | | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 594 | 1009 | 10686 | 2463 | 605 | 38 | - | 32 | 3 | 2305 | |
| 669 | 1244 | 10735 | 2156 | 454 | 21 | - | 41 | - | 2 | 2008 |
| 683 | 1370 | 10945 | 2054 | 365 | 47 | - | 40 | - | 1 | 1877 |
| 694 | 1473 | 10711 | 1983 | 305 | 38 | - | 47 | - | 4 | 1851 |
| 706 | 1586 | 11035 | 1986 | 249 | 57 | - | 49 | - | 4 | 1800 |
| 720 | 1714 | 10568 | 1884 | 264 | 50 | - | 35 | - | 2 | 1782 |
| 733 | 1833 | 10737 | 1850 | 202 | 58 | - | 31 | - | 3 | 1723 |
| 745 | 1948 | 10812 | 1860 | 70 | 52 | - | 6 | - | 11 | 1720 |
| 757 | 2060 | 11093 | 1891 | 57 | 84 | - | 65 | - | 33 | 1704 |
| 768 | 2161 | 10968 | 1883 | 137 | 56 | - | 83 | - | 39 | 1717 |
| 779 | 2261 | 10999 | 1863 | 199 | 65 | - | 93 | - | 45 | 1694 |
| 791 | 2373 | 10885 | 1829 | 255 | 54 | - | 47 | - | 26 | 1680 |
| 802 | 2473 | 11158 | 1776 | 344 | 13 | - | 62 | - | 28 | 1592 |
| 815 | 2592 | 11666 | 1696 | 449 | 25 | - | 54 | - | 25 | 1454 |
| 827 | 2701 | 11700 | 1693 | 529 | - | 16 | 30 | - | 7 | 1447 |
| 839 | 2808 | 11077 | 1790 | 621 | - | 57 | 34 | - | 12 | 1616 |
| 851 | 2920 | 11988 | 1695 | 741 | - | 34 | 39 | - | 10 | 1414 |
| 865 | 3035 | 11853 | 1833 | 913 | 13 | - | 31 | - | 9 | 1546 |

TWT 74 BLOW 43

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|--------|-----|------|------|------|------|-------|-------|
| DECE | 2 | 2 | 3 | 2 | 1431 | 4735 | 19744 | 19619 |
| 871 | - 1032 | | | 1191 | 1418 | 4690 | 19511 | 5298 |
| 935 | - 831 | | | 1193 | 1414 | 4673 | 19323 | 5297 |
| 956 | - 638 | | | 1198 | 1415 | 4676 | 19266 | 5295 |
| 969 | - 515 | | | 1201 | 1415 | 4685 | 19274 | 5295 |
| 980 | - 412 | | | 1202 | 1419 | 4687 | 19295 | 5293 |
| 991 | - 312 | | | 1201 | 1419 | 4687 | 19490 | 5293 |
| 1003 | - 202 | | | 1199 | 1415 | 4671 | 19295 | 5292 |
| 1015 | - 91 | | | 1198 | 1418 | 4677 | 19336 | 5288 |
| 1028 | 30 | | | 1198 | 1415 | 4668 | 19307 | 5286 |
| 1041 | 148 | | | 1199 | 1416 | 4667 | 19283 | 5285 |
| 1053 | 256 | | | 1197 | 1416 | 4666 | 19315 | 5283 |
| 1064 | 355 | | | 1195 | 1414 | 4656 | 19332 | 5281 |
| 1076 | 464 | | | 1193 | 1412 | 4649 | 19356 | 5278 |
| 1087 | 564 | | | 1192 | 1413 | 4651 | 19389 | 5278 |
| 1100 | 682 | | | 1189 | 1412 | 4646 | 19438 | 5276 |
| 1111 | 781 | | | 1188 | 1414 | 4648 | 19479 | 5273 |
| 1123 | 890 | | | 1184 | 1413 | 4645 | 19552 | 5271 |
| 1137 | 1000 | | | 1181 | 1411 | 4635 | 19585 | 5269 |

TWT 74 BLOW 43
CONFIG E32T9C2

2ND REDUCTION

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

BN ALPHA YAW CA CN CNB CLB -XCPN -XCPY PBC CMA

| DEC= | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
|------|-------|------|-------|----|-------|------|--------|-------|------|------|
| 871 | -1032 | 8604 | -3433 | 45 | 3 | 7177 | -68794 | -3329 | 2464 | |
| 935 | -831 | 8083 | -2526 | 39 | 1 | 7108 | 11042 | -3162 | 1795 | |
| 956 | -638 | 7484 | -1370 | 41 | 1 | 6131 | 25930 | -2802 | 840 | |
| 969 | -515 | 7156 | -427 | 24 | 2 | 3091 | -22405 | -2593 | 132 | |
| 980 | -412 | 7463 | 213 | 2 | 16286 | 3184 | -2619 | - | 346 | |
| 991 | -312 | 7713 | 618 | 3 | 10172 | 3539 | -2796 | - | 629 | |
| 1003 | -202 | 8288 | 931 | 11 | 3 | 8211 | 4337 | -3032 | - | 765 |
| 1015 | -91 | 8037 | 1055 | 15 | 3 | 6828 | 5152 | -3226 | - | 720 |
| 1028 | 30 | 7889 | 1268 | 4 | 2 | 6002 | 2507 | -3115 | - | 761 |
| 1041 | 148 | 8042 | 1789 | 6 | 2 | 6824 | 3908 | -3049 | - | 1221 |
| 1053 | 256 | 8187 | 2279 | 2 | 2 | 7246 | 3344 | -3167 | - | 1645 |
| 1064 | 355 | 8471 | 2598 | 1 | 1 | 7102 | 3295 | -3233 | - | 1845 |
| 1076 | 464 | 9203 | 2897 | 25 | 1 | 6924 | 5628 | -3283 | - | 2005 |
| 1087 | 564 | 8908 | 3208 | 30 | 3 | 6690 | 5452 | -3262 | - | 2146 |
| 1100 | 682 | 9179 | 3519 | 20 | 2 | 6435 | 5096 | -3299 | - | 2264 |
| 1111 | 781 | 9475 | 3812 | 19 | 1 | 6230 | 5356 | -3312 | - | 2375 |
| 1123 | 890 | 9314 | 4076 | 27 | 2 | 5955 | 9138 | -3353 | - | 2428 |
| 1137 | 1000 | 9639 | 4296 | 21 | 3 | 5699 | 4495 | -3331 | - | 2448 |

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SID-62-627
Appendix "A"

TWT 74 BLOW 43

CONFIG E32T9C2

2ND REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|-------|------|-----|-----|------|-------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 871 | -1032 | 9080 | -1836 | 1766 | 6 | 45 | -5 | -2023 | |
| 935 | -831 | 8363 | -1331 | 1359 | -50 | 39 | -5 | -1592 | |
| 956 | -638 | 7590 | -530 | 740 | -18 | 41 | -4 | -698 | |
| 969 | -515 | 7165 | -217 | 313 | 9 | 24 | -24 | -303 | |
| 980 | -412 | 7428 | -748 | 49 | 61 | 2 | 1007 | | |
| 991 | -312 | 7668 | 1037 | -96 | 78 | -3 | 4 | 1352 | |
| 1003 | -202 | 8250 | 1222 | -108 | 92 | -11 | 4 | 1482 | |
| 1015 | -91 | 8019 | 1182 | -36 | 76 | -15 | 3 | 1474 | |
| 1028 | 30 | 7896 | 1226 | -16 | 63 | 4 | 2 | 1553 | |
| 1041 | 148 | 8086 | 1581 | -306 | 81 | -6 | 2 | 1955 | |
| 1053 | 256 | 8281 | 1902 | -573 | 77 | -2 | 2 | 2296 | |
| 1064 | 355 | 8616 | 2068 | -658 | 88 | -1 | 1 | 2400 | |
| 1076 | 464 | 9407 | 2143 | -693 | 101 | -25 | 1 | 2278 | |
| 1087 | 564 | 9180 | 2317 | -748 | 129 | -30 | 2 | 2524 | |
| 1100 | 682 | 9532 | 2405 | -757 | 101 | -20 | 1 | 2523 | |
| 1111 | 781 | 9906 | 2489 | -763 | 86 | -19 | 3 | 2512 | |
| 1123 | 890 | 9833 | 2587 | -740 | 44 | -26 | 6 | 2631 | |
| 1137 | 1000 | 10239 | 2556 | -677 | 157 | -22 | 1 | 2496 | |

TWT 74 BLOW 44

2ND REDUCTION

CONFIG E29T9C2

TUNNEL CONDITIONS

| DEC= | BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|----|-------|-----|------|------|------|-------|-------|------|
| 726 | - | 1046 | 2 | 1193 | 1436 | 2 | 1 | 1 | 1 |
| 784 | - | 814 | | 1191 | 1419 | 4759 | 19815 | 19730 | 5305 |
| 801 | - | 661 | | 1192 | 1413 | 4700 | 19603 | 19471 | 5302 |
| 815 | - | 533 | | 1199 | 1416 | 4676 | 19484 | 19380 | 5300 |
| 827 | - | 421 | | 1200 | 1414 | 4685 | 19354 | 19465 | 5298 |
| 839 | - | 310 | | 1202 | 1416 | 4678 | 19301 | 19442 | 5298 |
| 851 | - | 197 | | 1201 | 1416 | 4682 | 19260 | 19474 | 5297 |
| 863 | - | 87 | | 1201 | 1413 | 4676 | 19268 | 19441 | 5293 |
| 875 | - | 23 | | 1201 | 1413 | 4668 | 19223 | 19410 | 5293 |
| 886 | - | 121 | | 1201 | 1416 | 4672 | 19235 | 19431 | 5290 |
| 899 | - | 240 | | 1200 | 1415 | 4667 | 19243 | 19401 | 5288 |
| 911 | - | 347 | | 1198 | 1415 | 4665 | 19280 | 19377 | 5285 |
| 923 | - | 456 | | 1197 | 1414 | 4662 | 19297 | 19359 | 5285 |
| 935 | - | 567 | | 1194 | 1412 | 4652 | 19321 | 19297 | 5283 |
| 949 | - | 691 | | 1192 | 1409 | 4640 | 19333 | 19229 | 5281 |
| 961 | - | 798 | | 1193 | 1415 | 4657 | 19386 | 19307 | 5278 |
| 974 | - | 913 | | 1189 | 1414 | 4653 | 19460 | 19263 | 5278 |
| 994 | - | 1035 | | 1187 | 1411 | 4640 | 19464 | 19195 | 5275 |
| | | | | 1184 | 1410 | 4633 | 19517 | 19141 | 5271 |

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SID-62-627
Appendix "A"

TWT 74 BLOW 44

2ND REDUCTION

CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|-----|-------|------|-------|-----|-----|-------|--------|-------|-------|-----|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 726 | -1046 | 8174 | -3674 | 47 | 2 | 6463 | 13047 | -3454 | 2375 | |
| 784 | -814 | 8116 | -2880 | 37 | 2 | 6649 | 14011 | -3383 | 1915 | |
| 801 | -661 | 6922 | -2296 | 27 | 3 | 6535 | 68092 | -3276 | 1500 | |
| 815 | -533 | 7497 | -1665 | 26 | 1 | 6021 | 11583 | -3073 | 1003 | |
| 827 | -421 | 7264 | -1071 | 32 | | 5284 | 11813 | -2931 | 566 | |
| 839 | -310 | 7307 | -505 | 18 | 1 | 4522 | -20802 | -2828 | 228 | |
| 851 | -197 | 7282 | 35 | 2 | 3 | 25231 | 2689 | -2752 | 88 | |
| 863 | -87 | 7462 | 417 | 3 | 2 | 7332 | 3696 | -2774 | 306 | |
| 875 | 23 | 7701 | 982 | -4 | 3 | 7648 | 3585 | -2899 | -751 | |
| 886 | 121 | 7976 | 1419 | 10 | 1 | 7640 | 895 | -3055 | -1084 | |
| 899 | 240 | 8070 | 1860 | -5 | 2 | 7482 | 3704 | -3147 | -1392 | |
| 911 | 347 | 8332 | 2208 | 1 | 2 | 7226 | 2949 | -3220 | -1596 | |
| 923 | 456 | 8201 | 2558 | -10 | 2 | 6946 | 4252 | -3280 | -1777 | |
| 935 | 567 | 8722 | 2875 | -15 | 1 | 6714 | 4837 | -3298 | -1930 | |
| 949 | 691 | 9169 | 3200 | - | 2 | 6455 | 2919 | -3291 | -2066 | |
| 961 | 798 | 9282 | 3513 | - | 3 | 6218 | 4102 | -3316 | -2184 | |
| 974 | 913 | 9198 | 3767 | -15 | 1 | 5933 | 5900 | -3281 | -2235 | |
| 994 | 1035 | 8798 | 3984 | 2 | 5 | 5694 | 3612 | -3297 | -2268 | |

TWT 74 BLOW 44

2ND REDUCTION

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|-------|------|------|-----|--------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 726 | - 1046 | 8705 | - 2130 | 1582 | - 47 | 46 | - 6 | - 2446 | |
| 784 | - 814 | 8442 | - 1702 | 1369 | - 34 | 37 | - 4 | - 2017 | |
| 801 | - 661 | 7140 | - 1483 | 1085 | - 4 | 27 | - 2 | - 1262 | |
| 815 | - 533 | 7619 | - 961 | 811 | - 30 | 26 | - 2 | - 731 | |
| 827 | - 421 | 7323 | - 535 | 550 | - 37 | 32 | - 2 | - 148 | |
| 839 | - 310 | 7323 | - 108 | 392 | - 8 | 18 | - 3 | - 392 | |
| 851 | - 197 | 7276 | 285 | 244 | 40 | 2 | 2 | 712 | |
| 863 | - 87 | 7455 | 531 | 153 | 62 | 3 | 2 | 1234 | |
| 875 | 23 | 7705 | 951 | - 104 | 92 | - 4 | 3 | | |
| 886 | 121 | 8004 | 1250 | - 288 | 44 | 10 | 1 | 1562 | |
| 899 | 240 | 8140 | 1521 | - 454 | 85 | - 5 | 2 | 1869 | |
| 911 | 347 | 8450 | 1700 | - 537 | 77 | - 1 | 2 | 2011 | |
| 923 | 456 | 8378 | 1897 | - 614 | 86 | - 10 | 1 | 2264 | |
| 935 | 567 | 8964 | 1999 | - 645 | 89 | - 15 | 2 | 2230 | |
| 949 | 691 | 9487 | 2074 | - 659 | 19 | - 1 | 2 | 2186 | |
| 961 | 798 | 9679 | 2191 | - 674 | 15 | - 1 | 3 | 2263 | |
| 974 | 913 | 9680 | 2259 | - 649 | 53 | - 14 | 4 | 2333 | |
| 994 | 1035 | 9370 | 2338 | - 632 | - 35 | - 3 | 5 | 2495 | |

TWT 74 BLOW 45

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | T TO |
|------|--------|-----|------|------|------|-------|-------|------|
| 770 | - 1028 | 2 | 1186 | 1415 | 4677 | 19650 | 1 | 1 |
| 815 | - 790 | | 1190 | 1419 | 4681 | 19561 | 19337 | 5293 |
| 829 | - 660 | | 1191 | 1418 | 4680 | 19528 | 19390 | 5288 |
| 841 | - 550 | | 1193 | 1422 | 4690 | 19512 | 19448 | 5286 |
| .853 | - 440 | | 1193 | 1415 | 4665 | 19426 | 19338 | 5285 |
| 865 | - 328 | | 1197 | 1420 | 4682 | 19385 | 19439 | 5285 |
| 877 | - 218 | | 1196 | 1416 | 4666 | 19336 | 19369 | 5283 |
| 890 | - 100 | | 1199 | 1419 | 4674 | 19295 | 19423 | 5283 |
| 902 | 13 | | 1201 | 1417 | 4665 | 19222 | 19398 | 5280 |
| 916 | 141 | | 1199 | 1416 | 4659 | 19230 | 19360 | 5278 |
| 927 | 243 | | 1199 | 1416 | 4657 | 19222 | 19352 | 5275 |
| 939 | 352 | | 1197 | 1414 | 4648 | 19255 | 19298 | 5273 |
| 950 | 449 | | 1198 | 1420 | 4665 | 19279 | 19380 | 5271 |
| 964 | 576 | | 1194 | 1413 | 4642 | 19299 | 19249 | 5269 |
| 976 | 682 | | 1194 | 1415 | 4644 | 19312 | 19259 | 5268 |
| 987 | 781 | | 1190 | 1413 | 4635 | 19357 | 19196 | 5264 |
| 999 | 888 | | 1190 | 1412 | 4632 | 19357 | 19183 | 5264 |
| 1015 | 1005 | | 1188 | 1412 | 4626 | 19369 | 19147 | 5259 |

TWT 74 BLOW 45 2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|------|--------|------|-----|------|---------|--------|--------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 770 | - 1028 | 8524 | - 3637 | 65 | 2 | 5813 | 18544 | - 3372 | 2114 | |
| 815 | - 790 | 8676 | - 3045 | 65 | 2 | 6177 | 10291 | - 3383 | 1881 | |
| 829 | - 660 | 7904 | - 2585 | 42 | 1 | 6244 | 9870 | - 3516 | 1614 | |
| 841 | - 550 | 8254 | - 2138 | 28 | 1 | 6180 | 14657 | - 3465 | 1921 | |
| 853 | - 440 | 7738 | - 1701 | 28 | 1 | 5903 | 12521 | - 3387 | 1004 | |
| 865 | - 328 | 7724 | - 1206 | 23 | 1 | 5620 | - 55117 | - 3279 | 678 | |
| 877 | - 218 | 7594 | - 844 | 21 | | 5583 | 56923 | - 3192 | 471 | |
| 890 | - 100 | 7465 | - 440 | 19 | | 5553 | - 28475 | - 3020 | 244 | |
| 902 | 13 | 7182 | 131 | 14 | | 9204 | - 3169 | - 2798 | - 121 | |
| 916 | 141 | 7436 | 620 | 6 | 2 | 6383 | 4097 | - 2885 | 396 | |
| 927 | 243 | 7360 | 948 | - 20 | 3 | 5974 | 5004 | - 2956 | - 567 | |
| 939 | 352 | 7750 | 1354 | - 20 | 2 | 6057 | 5157 | - 3030 | - 820 | |
| 950 | 449 | 7767 | 1769 | - 29 | 2 | 6251 | 6352 | - 3075 | - 1106 | |
| 964 | 576 | 8118 | 2305 | - 2 | | 6416 | 3458 | - 3185 | - 1479 | |
| 976 | 682 | 8271 | 2708 | - 38 | 1 | 6392 | 5929 | - 3268 | - 1731 | |
| 987 | 781 | 8197 | 3023 | 17 | 2 | 6319 | - 435 | - 3269 | - 1910 | |
| 999 | 888 | 8596 | 3340 | 41 | 5 | 6113 | - 3230 | - 2042 | | |
| 1015 | 1005 | 8516 | 3605 | 34 | 4 | 5918 | - 8431 | - 3213 | - 2133 | |

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Appendix "A"

TWT 74 BLOW 45

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|------|------|----|------|--------|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 770 | - 1028 | 9036 | - 2058 | 1349 | - 42 | 65 | - 10 | - 2277 | |
| 815 | - 790 | 9012 | - 1824 | 1308 | - 90 | 64 | - 11 | - 2024 | |
| 829 | - 660 | 8149 | - 1659 | 1151 | - 63 | 42 | - 6 | - 2035 | |
| 841 | - 550 | 8421 | - 1337 | 1014 | - 24 | 28 | - 2 | - 1587 | |
| 853 | - 440 | 7846 | - 1102 | 811 | - 30 | 28 | - 2 | - 1405 | |
| 865 | - 328 | 7781 | - 762 | 640 | - 4 | 23 | - 3 | - 979 | |
| 877 | - 218 | 7621 | - 554 | 541 | - 4 | 21 | - 1 | - 727 | |
| 890 | - 100 | 7471 | - 310 | 435 | - 6 | 19 | - 19 | - 414 | |
| 902 | 13 | 7182 | 115 | 236 | 23 | 14 | 14 | 160 | |
| 916 | 141 | 7449 | 437 | 126 | 60 | 6 | 2 | 586 | |
| 927 | 243 | 7393 | 636 | 55 | 105 | - | 20 | 3 | 860 |
| 939 | 352 | 7819 | 876 | 55 | 97 | - | 20 | 1 | 1120 |
| 950 | 449 | 7882 | 1156 | 209 | 89 | - | 29 | | 1467 |
| 964 | 576 | 8308 | 1479 | 399 | 66 | - | 2 | | 1780 |
| 976 | 682 | 8534 | 1707 | 518 | 134 | - | 37 | 3 | 2000 |
| 987 | 781 | 8531 | 1880 | 602 | 46 | 17 | | | 2204 |
| 999 | 888 | 9008 | 1974 | 616 | 2 | 42 | 1 | 2191 | |
| 1015 | 1005 | 9015 | 2064 | 628 | 29 | 34 | 2 | 2289 | |

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Appendix "A"

TWT 74 BLOW 47

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TTO |
|------|-------|------|------|------|------|-------|------|-----|
| DEC= | 2 | 2 | 3 | 2 | | 1 | 1 | |
| 843 | 1055 | 1998 | 1401 | 5626 | 7212 | 20154 | 5264 | |
| 857 | 1159 | 1998 | 1406 | 5641 | 7232 | 20210 | 5259 | |
| 869 | 1282 | 1998 | 1404 | 5626 | 7212 | 20154 | 5256 | |
| 881 | 1411 | 1998 | 1409 | 5639 | 7230 | 20202 | 5251 | |
| 893 | 1535 | 1998 | 1406 | 5627 | 7214 | 20159 | 5251 | |
| 903 | 1639 | 1998 | 1411 | 5639 | 7229 | 20201 | 5245 | |
| 913 | 1745 | 1998 | 1410 | 5634 | 7223 | 20184 | 5244 | |
| 924 | 1859 | 1998 | 1413 | 5640 | 7231 | 20207 | 5240 | |
| 934 | 1962 | 1998 | 1416 | 5644 | 7236 | 20220 | 5235 | |
| 944 | 2067 | 1998 | 1414 | 5639 | 7230 | 20203 | 5237 | |
| 954 | 2173 | 1998 | 1418 | 5651 | 7244 | 20243 | 5233 | |
| 966 | 2297 | 1998 | 1414 | 5629 | 7217 | 20166 | 5230 | |
| 976 | 2400 | 1998 | 1418 | 5639 | 7230 | 20202 | 5228 | |
| 986 | 2503 | 1998 | 1419 | 5643 | 7235 | 20216 | 5228 | |
| 997 | 2616 | 1998 | 1422 | 5648 | 7241 | 20234 | 5223 | |
| 1008 | 2729 | 1998 | 1421 | 5640 | 7231 | 20206 | 5220 | |
| 1061 | 3272 | 1998 | 1425 | 5642 | 7233 | 20211 | 5211 | |

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Appendix "A"

TWT 74 BLOW 47

2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|------|----|-----|-----|-------|-------|--------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 843 | 1055 | 8556 | 3095 | - | 19 | 9 | 4945 | 6752 | -1717 | -1530 |
| 857 | 1159 | 8639 | 3325 | - | 8 | 5 | 4744 | 5264 | -1867 | -1577 |
| 869 | 1282 | 8755 | 3649 | - | 11 | 6 | 4509 | 7401 | -1945 | -1645 |
| 881 | 1411 | 8787 | 3919 | - | 12 | 4 | 4202 | 9203 | -1960 | -1647 |
| 893 | 1535 | 8884 | 4240 | - | 13 | 1 | 3947 | 19799 | -2039 | -1673 |
| 903 | 1639 | 8907 | 4449 | - | 10 | -1 | 3760 | -4284 | -2054 | -1673 |
| 913 | 1745 | 8992 | 4711 | - | 5 | - | 3 | 3563 | 1426 | -2045 |
| 924 | 1859 | 9015 | 5005 | - | 1 | - | 4 | 3446 | 3261 | -2070 |
| 934 | 1962 | 9064 | 5284 | - | 1 | - | 6 | 3344 | 2678 | -2009 |
| 944 | 2067 | 9147 | 5530 | - | 4 | -7 | 3219 | 3736 | -2082 | -1780 |
| 954 | 2173 | 9234 | 5842 | - | 2 | - | 7 | 3151 | 2222 | -2057 |
| 966 | 2297 | 9341 | 6173 | - | 13 | - | 11 | 3017 | 5393 | -2114 |
| 976 | 2400 | 9349 | 6450 | - | 14 | - | 11 | 2922 | 7552 | -2129 |
| 986 | 2503 | 9352 | 6752 | - | 18 | - | 11 | 2844 | 12884 | -2157 |
| 997 | 2616 | 9364 | 7061 | - | 18 | - | 11 | 2738 | 16296 | -2174 |
| 1008 | 2729 | 9370 | 7400 | - | 19 | - | 12 | 2650 | 5159 | -2192 |
| 1061 | 3272 | 9276 | 9012 | - | 33 | - | 16 | 2370 | -30106 | -2243 |
| | | | | | | | | | | -2136 |

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Appendix "A"

TWT 74 BLOW 47

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|------|-----|-----|-----|------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 843 | 1055 | 8978 | 1475 | -220 | 50 | -20 | 5 | 1643 | |
| 857 | 1159 | 9130 | 1522 | -194 | 36 | -9 | 4 | 1667 | |
| 869 | 1282 | 9346 | 1615 | -159 | 26 | -12 | 3 | 1728 | |
| 881 | 1411 | 9477 | 1659 | -78 | 20 | -13 | 1 | 1750 | |
| 893 | 1535 | 9689 | 1737 | -4 | 8 | -13 | 2 | 1792 | |
| 903 | 1639 | 9800 | 1755 | -61 | -14 | -10 | 4 | 1791 | |
| 913 | 1745 | 9991 | 1798 | -138 | -31 | -4 | 4 | 1800 | |
| 924 | 1859 | 10140 | 1870 | -181 | -53 | 2 | 3 | 1844 | |
| 934 | 1962 | 10312 | 1933 | -225 | -40 | 1 | 6 | 1875 | |
| 944 | 2067 | 10511 | 1944 | -290 | -50 | 6 | 6 | 1850 | |
| 954 | 2173 | 10741 | 2008 | -327 | -27 | 1 | 8 | 1870 | |
| 966 | 2297 | 11010 | 2039 | -411 | -55 | 16 | 5 | 1852 | |
| 976 | 2400 | 11164 | 2091 | -472 | -31 | 17 | 4 | 1873 | |
| 986 | 2503 | 11330 | 2162 | -528 | -19 | 21 | 2 | 1908 | |
| 997 | 2616 | 11518 | 2210 | -609 | -13 | 21 | 3 | 1919 | |
| 1008 | 2729 | 11720 | 2281 | -684 | -2 | 23 | 2 | 1946 | |
| 1061 | 3272 | 12676 | 2569 | 990 | 10 | 37 | 4 | 2026 | |

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Appendix "A"

TWT 74 BLOW 48

3RD REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| DEC | BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TT0 |
|-----|------|-------|-----|------|------|------|------|------|-------|
| 492 | 3594 | 2 | 2 | 3 | 1998 | 1412 | 5637 | 7227 | 20196 |
| 518 | 3655 | | | | 1998 | 1419 | 5648 | 7241 | 20235 |
| 530 | 3772 | | | | 1998 | 1415 | 5632 | 7220 | 20175 |
| 546 | 3938 | | | | 1998 | 1420 | 5642 | 7233 | 20211 |
| 555 | 4029 | | | | 1998 | 1417 | 5627 | 7214 | 20159 |
| 566 | 4142 | | | | 1998 | 1421 | 5638 | 7228 | 20197 |
| 592 | 4400 | | | | 1998 | 1425 | 5639 | 7230 | 20202 |
| 618 | 4658 | | | | 1998 | 1424 | 5629 | 7217 | 20168 |
| 640 | 4876 | | | | 1998 | 1428 | 5637 | 7227 | 20195 |
| 650 | 4972 | | | | 1998 | 1431 | 5642 | 7234 | 20214 |
| 660 | 5058 | | | | 1998 | 1429 | 5635 | 7224 | 20187 |
| 670 | 5113 | | | | 1998 | 1431 | 5638 | 7220 | 20197 |
| | | | | | | | | | 5196 |

TWT 74 BLOW 48

3RD REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPY | PBC | CMA | 4 | |
|------|-------|------|-------|----|-----|------|--------|------|------|------|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 492 | 3594 | 8989 | 9861 | 42 | -17 | 2214 | - | 2023 | - | 2184 | |
| 518 | 3655 | 8832 | 9915 | 49 | -16 | 2174 | - | 2109 | - | 2155 | |
| 530 | 3772 | 9036 | 10267 | 51 | -16 | 2105 | -22568 | - | 2093 | - | 2161 |
| 546 | 3938 | 9143 | 10570 | 43 | -14 | 1976 | -22374 | - | 2158 | - | 2088 |
| 555 | 4029 | 9107 | 10722 | 39 | -14 | 1907 | -53192 | - | 2201 | - | 2044 |
| 566 | 4142 | 9171 | 10873 | 33 | -16 | 1808 | -23595 | - | 2223 | - | 1965 |
| 592 | 4400 | 7830 | 10810 | 37 | -16 | 1500 | 22015 | - | 2251 | - | 1621 |
| 618 | 4658 | 7899 | 11182 | 43 | -17 | 1266 | 19861 | - | 2241 | - | 1416 |
| 640 | 4876 | 8743 | 11762 | 43 | -18 | 1221 | 17404 | - | 2204 | - | 1437 |
| 650 | 4972 | 8753 | 11778 | 44 | -19 | 116 | 19155 | - | 2181 | - | 1250 |
| 660 | 5058 | 8789 | 11670 | 42 | -19 | 1062 | 12596 | - | 2129 | - | 1240 |
| 670 | 5112 | 8762 | 11576 | 39 | -19 | 1008 | 11819 | - | 2114 | - | 1166 |

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Appendix "A"

TWT 74 BLOW 48

CONFIG E23T9C2

3RD REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN DEC= | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------------|-------|-----|-------|------|------|----|-----|-----|------|
| 492 | 3594 | 2 | 13065 | 2708 | 1186 | - | 4 | 4 | 4 |
| 518 | 3655 | | 12999 | 2706 | 1224 | 3 | 43 | 11 | 2073 |
| 530 | 3772 | | 13429 | 2593 | 1333 | 20 | 49 | 16 | 2082 |
| 546 | 3938 | | 13774 | 2370 | 1502 | 17 | 50 | 19 | 1931 |
| 555 | 4029 | | 13880 | 2289 | 1591 | 7 | 42 | 16 | 1721 |
| 566 | 4142 | | 14070 | 2086 | 1718 | - | 39 | 15 | 1649 |
| 592 | 4400 | | 13142 | 2338 | 1984 | - | 35 | 9 | 1483 |
| 618 | 4658 | | 13551 | 1949 | 2304 | - | 37 | 14 | 1779 |
| 640 | 4876 | | 14608 | 1179 | 2496 | - | 41 | 20 | 1438 |
| 650 | 4972 | | 14645 | 936 | 2587 | 4 | 42 | 20 | 807 |
| 660 | 5058 | | 14596 | 620 | 2667 | 44 | 43 | 21 | 629 |
| 670 | 5113 | | 14511 | 443 | 2711 | 44 | 41 | 18 | 425 |
| | | | | | | | 39 | 18 | 386 |

TWT 74 BLOW 49

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TT0 |
|------|--------|------|------|------|------|-------|------|------|
| DEC= | 2 | 3 | 2 | 1411 | 5606 | 7187 | 1 | 1 |
| 832 | - 1033 | 1998 | 1411 | 5618 | 7202 | 20126 | 5223 | 5223 |
| 891 | - 655 | 1998 | 1419 | 5632 | 7220 | 20176 | 5209 | 5209 |
| 903 | - 556 | 1998 | 1425 | 5620 | 7206 | 20135 | 5204 | 5204 |
| 916 | - 447 | 1998 | 1423 | 5626 | 7212 | 20154 | 5198 | 5198 |
| 930 | - 334 | 1998 | 1426 | 5626 | 7218 | 20169 | 5196 | 5196 |
| 943 | - 229 | 1998 | 1428 | 5630 | 7207 | 20139 | 5192 | 5192 |
| 956 | - 122 | 1998 | 1427 | 5621 | 7222 | 20180 | 5191 | 5191 |
| 969 | - 15 | 1998 | 1430 | 5633 | 7216 | 20163 | 5189 | 5189 |
| 982 | 92 | 1998 | 1430 | 5628 | 7227 | 20194 | 5184 | 5184 |
| 996 | 206 | 1998 | 1434 | 5637 | 7218 | 20169 | 5184 | 5184 |
| 1011 | 327 | 1998 | 1432 | 5630 | 7217 | 20167 | 5179 | 5179 |
| 1025 | 439 | 1998 | 1434 | 5629 | 7220 | 20176 | 5177 | 5177 |
| 1039 | 548 | 1998 | 1436 | 5632 | 7212 | 20154 | 5175 | 5175 |
| 1053 | 659 | 1998 | 1435 | 5626 | 7221 | 20178 | 5174 | 5174 |
| 1067 | 772 | 1998 | 1437 | 5634 | 7222 | 20182 | 5170 | 5170 |
| 1081 | 882 | 1998 | 1439 | 5630 | 7218 | 20169 | 5165 | 5165 |
| 1107 | 1005 | 1998 | 1440 | | | | | |

TWT 74 BLOW 49

2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|--------|------|--------|----|------|-------|--------|---------|--------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 832 | - 1033 | 8695 | - 3070 | 24 | 1 | 5315 | 18867 | - 1467 | 1631 | |
| 891 | - 655 | 8155 | - 2257 | 35 | 2 | 6118 | - 1806 | 1381 | | |
| 903 | - 556 | 7936 | - 1980 | 36 | 6444 | 23696 | - 1869 | 1276 | | |
| 916 | - 447 | 7595 | - 1716 | 29 | 6793 | 23835 | - 1901 | 1166 | | |
| 930 | - 334 | 7320 | - 1406 | 39 | 1 | 7125 | 15235 | - 1914 | 1002 | |
| 943 | - 229 | 7102 | - 1077 | 54 | 2 | 7492 | 12894 | - 1963 | 807 | |
| 956 | - 122 | 6900 | - 655 | 63 | 4 | 7887 | 11769 | - 1976 | 517 | |
| 969 | - 15 | 6537 | - 11 | 68 | 4 | 14463 | 1995 | - 2 | | |
| 982 | 92 | 6952 | 555 | 27 | - | 1 | 8109 | - 44924 | - 1978 | - 450 |
| 996 | 206 | 7042 | 980 | 13 | | 7473 | - 988 | - 1953 | - 733 | |
| 1011 | 327 | 7451 | 1324 | 8 | | 7081 | 478 | - 1990 | - 937 | |
| 1025 | 439 | 7581 | 1636 | 3 | | 6769 | 3764 | - 1994 | - 1108 | |
| 1039 | 548 | 7747 | 1910 | - | 2 | 6401 | 3471 | - 1943 | - 1223 | |
| 1053 | 659 | 7911 | 2207 | - | 18 | 1 | 5987 | 8342 | - 1946 | - 1322 |
| 1067 | 772 | 7893 | 2490 | 6 | - | 2 | 5804 | 1520 | - 1979 | - 1445 |
| 1081 | 882 | 8408 | 2730 | 20 | - | 2 | 5664 | 6487 | - 1952 | - 1546 |
| 1107 | 1005 | 8302 | 3002 | 17 | - | 1 | 5267 | 6065 | - 1935 | - 1581 |

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Appendix "A"

TWT 74 BLOW 49

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|------|--------|-------|------|----|-----|-----|--------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 832 | - 1033 | 9104 | - 1460 | 1052 | - 15 | 24 | - | 3 | - 1604 |
| 881 | - 655 | 8359 | - 1312 | 1032 | - 2 | 35 | - | 3 | - 1569 |
| 903 | - 556 | 8091 | - 1201 | 1004 | - 18 | 36 | - | 3 | - 1485 |
| 916 | - 447 | 7706 | - 1119 | 962 | - 14 | 29 | - | 2 | - 1452 |
| 930 | - 334 | 7390 | - 977 | 883 | - 32 | 39 | - | 3 | - 1323 |
| 943 | - 229 | 7139 | - 793 | 782 | - 55 | 54 | - | 4 | - 1110 |
| 956 | - 122 | 6912 | - 508 | 615 | - 73 | 63 | - | 5 | - 735 |
| 969 | - 15 | 6537 | - 6 | 282 | - 60 | 68 | - | 4 | 9 |
| 982 | .92 | 6960 | 444 | 30 | 6 | 27 | | | 637 |
| 996 | 206 | 7073 | 726 | - 115 | 32 | 13 | | | 1026 |
| 1011 | 327 | 7515 | 897 | - 194 | 29 | 8 | | | 1194 |
| 1025 | 439 | 7684 | 1052 | - 261 | 49 | - | | | 1369 |
| 1039 | 548 | 7894 | 1162 | - 283 | 64 | - | | | 1472 |
| 1053 | 659 | 8112 | 1284 | - 282 | 35 | - | | | 1583 |
| 1067 | 772 | 8156 | 1408 | - 317 | 35 | 6 | - | 1 | 1726 |
| 1081 | 882 | 8727 | 1408 | - 320 | 58 | - | | | 1613 |
| 1107 | 1005 | 8699 | 1508 | - 275 | 60 | - | | | 1733 |

TWT 74 BLOW 52 2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|-----|------|------|-------|------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 687 | - | 988 | 3493 | 1434 | 11830 | 1567 | 13380 | 5168 |
| 735 | - | 645 | 3493 | 1438 | 11844 | 1568 | 13395 | 5163 |
| 747 | - | 549 | 3493 | 1437 | 11838 | 1568 | 13388 | 5162 |
| 761 | - | 431 | 3493 | 1438 | 11843 | 1568 | 13394 | 5162 |
| 774 | - | 326 | 3493 | 1437 | 11837 | 1568 | 13388 | 5162 |
| 786 | - | 226 | 3493 | 1439 | 11848 | 1569 | 13399 | 5162 |
| 800 | - | 111 | 3493 | 1439 | 11843 | 1568 | 13394 | 5160 |
| 813 | - | 3 | 3493 | 1440 | 11844 | 1568 | 13395 | 5158 |
| 825 | | 98 | 3493 | 1437 | 11831 | 1567 | 13380 | 5160 |
| 839 | | 213 | 3493 | 1439 | 11832 | 1567 | 13382 | 5156 |
| 851 | | 308 | 3493 | 1440 | 11841 | 1568 | 13392 | 5156 |
| 864 | | 412 | 3493 | 1441 | 11842 | 1568 | 13392 | 5155 |
| 877 | | 515 | 3493 | 1440 | 11837 | 1567 | 13387 | 5155 |
| 890 | | 620 | 3493 | 1440 | 11832 | 1567 | 13382 | 5155 |
| 904 | | 730 | 3493 | 1441 | 11846 | 1569 | 13397 | 5155 |
| 917 | | 834 | 3493 | 1442 | 11836 | 1567 | 13386 | 5151 |
| 933 | | 953 | 3493 | 1440 | 11825 | 1566 | 13373 | 5151 |

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Appendix "A"

TWT 74 BLOW 52

2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | DEC= | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|-----|------|-------|------|-------|----|-----|------|-------|--------|-----|------|-----|
| | | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 687 | - | 988 | 6610 | -3203 | 40 | 5 | 5407 | -2512 | - | 53 | 1732 | |
| 735 | - | 645 | 6142 | -2245 | 14 | 1 | 5980 | 17529 | - | 178 | 1342 | |
| 747 | - | 549 | 5960 | -2064 | 11 | 1 | 6404 | 8476 | - | 207 | 1322 | |
| 761 | - | 431 | 5810 | -1803 | 13 | 1 | 6824 | 26138 | - | 237 | 1230 | |
| 774 | - | 326 | 5708 | -1515 | 14 | 1 | 7151 | 11730 | - | 225 | 1083 | |
| 786 | - | 226 | 5620 | -1142 | 19 | 1 | 7558 | 25781 | - | 261 | 863 | |
| 800 | - | 111 | 5608 | -597 | 32 | - | 1 | 7882 | 21777 | - | 279 | 471 |
| 813 | - | 3 | 5658 | -41 | 27 | - | 2 | 8592 | 31715 | - | 302 | 35 |
| 825 | | 98 | 5623 | 684 | 1 | | 7850 | 2888 | - | 301 | - | |
| 839 | | 213 | 5652 | 1235 | 12 | | 7597 | 5276 | - | 325 | - | |
| 851 | | 308 | 5719 | 1581 | 20 | - | 7269 | 5967 | - | 320 | - | |
| 864 | | 412 | 5830 | 1831 | 20 | - | 1 | 6976 | 6391 | - | 302 | - |
| 877 | | 515 | 5944 | 2038 | 19 | - | 1 | 6607 | 6390 | - | 343 | - |
| 890 | | 620 | 6130 | 2268 | 26 | - | 1 | 6188 | 7341 | - | 325 | - |
| 904 | | 730 | 6327 | 2432 | 55 | - | 1 | 5729 | 14955 | - | 285 | - |
| 917 | | 834 | 6485 | 2796 | 71 | - | 2 | 5526 | 25147 | - | 266 | - |
| 933 | | 953 | 6632 | 3216 | 50 | - | 5 | 5566 | -13575 | - | 248 | - |
| | | | | | | | | | | | 1790 | |

TWT 74 BLOW 52.

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|--------|------|-----|----|-----|-----|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 687 | - 988 | 7062 | - 2022 | 1019 | 71 | 40 | - | 2 | - 2863 |
| 735 | - 645 | 6356 | - 1541 | 909 | 10 | 14 | - | 1 | - 2424 |
| 747 | - 549 | 6130 | - 1484 | 937 | 21 | 11 | - | 1 | - 2421 |
| 761 | - 431 | 5929 | - 1361 | 921 | 6 | 13 | - | 2 | - 2296 |
| 774 | - 326 | 5785 | - 1188 | 859 | 16 | 14 | - | 2 | - 2054 |
| 786 | - 226 | 5660 | - 919 | 752 | 8 | 19 | - | 1 | - 1624 |
| 800 | - 111 | 5619 | - 488 | 530 | 17 | 32 | - | 2 | - 869 |
| 813 | - 3 | 5658 | 44 | 227 | 10 | 27 | - | 2 | 77 |
| 825 | 98 | 5634 | 588 | 75 | 41 | 1 | - | 1 | 1044 |
| 839 | 213 | 5694 | 1025 | 302 | 57 | 12 | - | 1 | 1799 |
| 851 | 308 | 5796 | 1271 | 402 | 72 | 20 | - | 1 | 2193 |
| 864 | 412 | 5947 | 1406 | 447 | 61 | 20 | - | 2 | 2365 |
| 877 | 515 | 6103 | 1496 | 446 | 59 | 19 | - | 3 | 2451 |
| 890 | 620 | 6339 | 1593 | 423 | 63 | 26 | - | 4 | 2513 |
| 904 | 730 | 6584 | 1609 | 353 | 47 | 55 | - | 8 | 2444 |
| 917 | 834 | 6822 | 1826 | 383 | 32 | 70 | - | 12 | 2677 |
| 933 | 953 | 7073 | 2074 | 490 | 30 | 48 | - | 13 | 2932 |

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Appendix "A"

TWT 74 BLOW 53

2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|-------|-----|------|------|------|-------|------|-------|
| 1100 | 1009 | 2 | 3 | 3493 | 1429 | 11832 | 1 | 1 |
| 1144 | 1190 | 2 | 3 | 3493 | 1430 | 11824 | 1566 | 13372 |
| 1170 | 1407 | 2 | 3 | 3493 | 1430 | 11820 | 1565 | 13368 |
| 1196 | 1620 | 2 | 3 | 3493 | 1430 | 11819 | 1565 | 13367 |
| 1222 | 1833 | 2 | 3 | 3493 | 1433 | 11822 | 1565 | 13370 |
| 1248 | 2049 | 2 | 3 | 3493 | 1431 | 11813 | 1564 | 13360 |
| 1274 | 2262 | 2 | 3 | 3493 | 1431 | 11810 | 1564 | 13357 |
| 1300 | 2476 | 2 | 3 | 3493 | 1432 | 11806 | 1563 | 13352 |
| 1326 | 2685 | 2 | 3 | 3493 | 1432 | 11802 | 1563 | 13348 |
| 1352 | 2894 | 2 | 3 | 3493 | 1432 | 11789 | 1561 | 13333 |
| 1378 | 3102 | 2 | 3 | 3493 | 1430 | 11772 | 1559 | 13314 |
| 1404 | 3310 | 2 | 3 | 3493 | 1428 | 11755 | 1557 | 13295 |

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Appendix "A"

TWT 74 BLOW 53

CONFIG E23T9C2

2ND REDUCTION

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|------|-------|------|------|----|-----|------|--------|-------|-----|--------|
| DEC= | | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 1100 | 1009 | 6508 | 3179 | 14 | 6 | 4212 | 1548 | - | 310 | - 1339 |
| | 1144 | 1190 | 6742 | 3629 | 27 | 3 | 4098 | -29681 | - | 374 | - 1487 |
| | 1170 | 1407 | 7065 | 4355 | - | 4 | 3986 | -20246 | - | 427 | - 1736 |
| | 1196 | 1620 | 7486 | 4965 | - | 36 | 3991 | -1082 | - | 433 | - 1982 |
| | 1222 | 1833 | 7827 | 5390 | - | 47 | 5 | 3808 | 53518 | - | 486 |
| | 1248 | 2049 | 8097 | 5948 | - | 36 | 3609 | - | 504 | - | 2147 |
| | 1274 | 2262 | 8444 | 6646 | - | 35 | 2 | 3518 | 8758 | - | 527 |
| | 1300 | 2476 | 8828 | 7517 | - | 23 | 1 | 3558 | 8157 | - | 551 |
| | 1326 | 2685 | 9289 | 8357 | - | 29 | 3 | 3662 | 9563 | - | 568 |
| | 1352 | 2894 | 9699 | 9008 | - | 18 | 18 | 3502 | 5993 | - | 591 |
| | 1378 | 3102 | 9831 | 9558 | - | 4 | 5 | 3286 | 4037 | - | 573 |
| | 1404 | 3310 | 9839 | 9942 | - | 8 | - | 13 | 3058 | - | 3141 |
| | | | | | | | | | | | - 264 |
| | | | | | | | | | | | - 578 |
| | | | | | | | | | | | - 3040 |

TWT 74 BLOW 53

2ND REDUCTION

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|--------|-------|-------|------|----|-----|----|-----|-----|------|
| DEC= 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1100 | 1009 | 6964 | 1990 | - | 94 | 93 | 12 | 8 | 2857 |
| 1144 | 1190 | 7345 | 2160 | - | 96 | 2 | - | 3 | 2941 |
| 1170 | 1407 | 7912 | 2506 | - | 111 | - | 31 | - | 14 |
| 1196 | 1620 | 8574 | 2679 | - | 155 | - | 89 | - | 3168 |
| 1222 | 1833 | 9125 | 2655 | - | 83 | 9 | - | 35 | - |
| 1248 | 2049 | 9667 | 2737 | - | 4 | 1 | - | 10 | 3124 |
| 1274 | 2262 | 10350 | 2888 | - | 38 | 62 | - | 10 | 2910 |
| 1300 | 2476 | 11164 | 3128 | - | 19 | 44 | - | 12 | 2831 |
| 1326 | 2685 | 12062 | 3262 | - | 131 | 45 | - | 12 | 2790 |
| 1352 | 2894 | 12846 | 3190 | - | 11 | 61 | - | 9 | 2802 |
| 1378 | 3102 | 13351 | 3124 | - | 175 | 42 | - | 6 | 2704 |
| 1404 | 3310 | 13671 | 2957 | - | 391 | 24 | - | 6 | 2340 |
| | | | | | | | | | 2163 |

TWT 74 BLOW 58 2ND REDUCTION

CONFIG E23T9C2

TUNNEL CONDITIONS

| DEC# | BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TT0 |
|------|------|-------|------|-------|------|-------|-------|-------|------|
| 982 | 3559 | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 1026 | 3719 | 3493 | 1453 | 11802 | 1563 | 13347 | 13367 | 13367 | 5115 |
| 1048 | 3948 | 3493 | 1453 | 11819 | 1565 | 13367 | 13367 | 13367 | 5117 |
| 1070 | 4169 | 3493 | 1452 | 11804 | 1565 | 13367 | 13367 | 13367 | 5121 |
| 1091 | 4377 | 3493 | 1452 | 11810 | 1564 | 13350 | 13350 | 13350 | 5119 |
| 1113 | 4597 | 3493 | 1453 | 11819 | 1565 | 13367 | 13367 | 13367 | 5121 |
| 1134 | 4802 | 3493 | 1452 | 11822 | 1565 | 13370 | 13370 | 13370 | 5124 |
| 1165 | 5046 | 3493 | 1452 | 11823 | 1566 | 13371 | 13371 | 13371 | 5124 |

TWT 74 BELOW 58 2ND REDUCTION

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|-------|----|-----|-----|-------|--------|------|-------|
| DEC | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 982 | 3559 | 9744 | 10214 | 22 | - | 15 | 2723 | -4354 | 359 | -2781 |
| 1026 | 3719 | 9711 | 10377 | 26 | - | 15 | 2524 | -5186 | 144 | -2620 |
| 1048 | 3948 | 9517 | 10592 | 32 | - | 15 | 2254 | -11776 | 61 | -2388 |
| 1070 | 4169 | 9353 | 10805 | 36 | - | 18 | 2021 | -26323 | -20 | -2183 |
| 1091 | 4377 | 8785 | 10895 | 41 | - | 19 | 1799 | -92434 | -74 | -1960 |
| 1113 | 4597 | 8523 | 11099 | 36 | - | 16 | 1599 | -9118 | -128 | -1775 |
| 1134 | 4802 | 8835 | 11402 | 40 | - | 17 | 1513 | -72592 | -170 | -1725 |
| 1165 | 5046 | 8549 | 11631 | 46 | - | 20 | 1342 | -18374 | -199 | -1561 |

TWT 74 BLOW 58

CONFIG E23T9C2

2ND REDUCTION

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| DEC= | BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|------|-------|------|------|----|-----|----|------|-----|-----|
| | | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 982 | 3559 | 13868 | 2636 | 729 | 30 | 27 | 1 | 1901 | | |
| 1026 | 3719 | 14009 | 2398 | 938 | 31 | 29 | 4 | 1712 | | |
| 1048 | 3948 | 14081 | 2124 | 1226 | 21 | 34 | 8 | 1509 | | |
| 1070 | 4169 | 14171 | 1848 | 1487 | 12 | 39 | 11 | 1304 | | |
| 1091 | 4377 | 13881 | 1790 | 1713 | 4 | 43 | 15 | 1289 | | |
| 1113 | 4597 | 13903 | 1587 | 1947 | 30 | 37 | 15 | 1142 | | |
| 1134 | 4802 | 14386 | 1060 | 2103 | 5 | 40 | 18 | 737 | | |
| 1165 | 5046 | 14412 | 811 | 2323 | 30 | 45 | 23 | 563 | | |

TWT 74 BLOW 59

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN DEC= | ALPHA | YAW | MACH | RN | HO | PO | TT0 |
|------------|-------|-----|------|------|-------|------|-------|
| 935 | 1275 | 2 | 3493 | 1446 | 11836 | 1567 | 13386 |
| 977 | 1440 | | 3493 | 1443 | 11812 | 1564 | 13359 |
| 999 | 1655 | | 3493 | 1445 | 11825 | 1566 | 13374 |
| 1021 | 1868 | | 3493 | 1446 | 11830 | 1567 | 13380 |
| 1043 | 2082 | | 3493 | 1446 | 11830 | 1567 | 13380 |
| 1066 | 2305 | | 3493 | 1446 | 11833 | 1567 | 13382 |
| 1088 | 2518 | | 3493 | 1445 | 11826 | 1566 | 13375 |
| 1109 | 2717 | | 3493 | 1444 | 11823 | 1566 | 13372 |
| 1133 | 2946 | | 3493 | 1445 | 11830 | 1567 | 13379 |
| 1156 | 3165 | | 3493 | 1445 | 11829 | 1566 | 13378 |
| 1178 | 3371 | | 3493 | 1443 | 11820 | 1565 | 13368 |

TWT 74 BLOW 59
CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| DEC= | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPY | -XCPN | PBC | CMA |
|------|------|-------|------|------|-----|-----|--------|--------|---------|--------|--------|
| 935 | 1275 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 977 | 1440 | | 6798 | 3960 | - | 66 | 5 | 3929 | 86868 | 191 - | 1556 - |
| 999 | 1655 | | 7075 | 4454 | - | 66 | 4 | 3948 - | 8098 - | 61 - | 1758 - |
| 1021 | 1868 | | 7470 | 4952 | - | 38 | 5 | 3916 - | 16738 - | 139 - | 1940 - |
| 1043 | 2082 | | 7937 | 5538 | - | 48 | 6 | 3749 - | 14443 - | 228 - | 2076 - |
| 1066 | 2305 | | 8033 | 5981 | - | 46 | 6 | 3541 - | 9756 - | 276 - | 2118 - |
| 1088 | 2518 | | 8405 | 6740 | - | 30 | 4 | 3499 - | 6921 - | 347 - | 2358 - |
| 1109 | 2717 | | 8798 | 7618 | - | 27 | 3541 - | 8344 - | 394 - | 2697 - | |
| 1133 | 2946 | | 9333 | 8406 | - | 26 | 2 | 3617 - | 6733 - | 423 - | 3040 - |
| 1156 | 3165 | | 9705 | 9089 | - | 17 | 2 | 3427 - | 5068 - | 477 - | 3115 - |
| 1178 | 3371 | | 9802 | 9593 | 6 - | 8 | 8 | 3198 - | 1597 - | 500 - | 3068 - |
| | | | 9818 | 9927 | 9 - | 10 | 10 | 2945 - | 1125 - | 518 - | 2924 - |

TWT 74 BLOW 59

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|-----|-----|----|-----|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 935 | 1275 | 7505 | 2363 | - | 62 | 8 | 66 | 10 | 3149 |
| 977 | 1440 | 7960 | 2555 | - | 104 | - | 59 | - | 3210 |
| 999 | 1655 | 8572 | 2618 | - | 117 | - | 19 | - | 3055 |
| 1021 | 1868 | 9293 | 2704 | - | 56 | 42 | - | 48 | 10 |
| 1043 | 2082 | 9634 | 2736 | 40 | 69 | - | 45 | - | 2910 |
| 1066 | 2305 | 10373 | 2910 | 45 | 78 | - | 29 | - | 2840 |
| 1088 | 2518 | 11204 | 3150 | - | 13 | 51 | - | 25 | 8 |
| 1109 | 2717 | 12141 | 3217 | - | 94 | 70 | - | 24 | 2805 |
| 1133 | 2946 | 12920 | 3141 | 53 | 84 | - | 16 | - | 2812 |
| 1156 | 3165 | 13378 | 3023 | 257 | 39 | - | 19 | - | 2650 |
| 1178 | 3371 | 13677 | 2809 | 503 | 47 | 13 | - | 4 | 2239 |
| | | | | | | | | | 2054 |

TWT 74 BLOW 60

CONFIG E25T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TTO |
|------|-------|------|------|------|------|-------|------|-----|
| DEC= | 2 | 2 | 3 | 2 | | 1 | 1 | 1 |
| 972 | 1172 | 1998 | 1433 | 5618 | 7202 | 20126 | 5175 | |
| 1020 | 1349 | 1998 | 1434 | 5626 | 7213 | 20155 | 5177 | |
| 1044 | 1562 | 1998 | 1434 | 5627 | 7214 | 20158 | 5179 | |
| 1070 | 1784 | 1998 | 1432 | 5621 | 7206 | 20136 | 5179 | |
| 1094 | 1992 | 1998 | 1433 | 5623 | 7209 | 20143 | 5179 | |
| 1119 | 2206 | 1998 | 1433 | 5623 | 7209 | 20145 | 5179 | |
| 1145 | 2421 | 1998 | 1433 | 5626 | 7212 | 20154 | 5180 | |
| 1171 | 2637 | 1998 | 1435 | 5631 | 7219 | 20172 | 5179 | |
| 1198 | 2865 | 1998 | 1434 | 5624 | 7211 | 20150 | 5175 | |
| 1225 | 3086 | 1998 | 1433 | 5622 | 7208 | 20141 | 5177 | |

TWT 74 BLOW 60

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|-------|------|----|-----|------|-------|--------|-------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 972 | 1172 | 9387 | 3726 | - | 24 | 11 | 5395 | 7238 | -1055 | -2010 |
| 1020 | 1349 | 9660 | 4053 | 86 | 13 | 4784 | -2294 | -1639 | -1939 | |
| 1044 | 1562 | 9885 | 4524 | - | 102 | 4 | 4280 | -9343 | -1804 | -1936 |
| 1070 | 1784 | 10145 | 4970 | - | 100 | 1 | 3805 | -3080 | -1865 | -1891 |
| 1094 | 1992 | 10355 | 5534 | - | 41 | 1 | 3620 | -14732 | -1909 | -2003 |
| 1119 | 2206 | 10540 | 6134 | - | 26 | - | 3471 | -15709 | -2023 | -2129 |
| 1145 | 2421 | 10717 | 6563 | - | 12 | 1 | 3264 | 7597 | -2091 | -2142 |
| 1171 | 2637 | 10780 | 7006 | 31 | - | 4 | 3052 | -14285 | -2108 | -2138 |
| 1198 | 2865 | 10798 | 7704 | 20 | - | 6 | 2862 | 9777 | -2141 | -2205 |
| 1225 | 3086 | 10872 | 8325 | - | 10 | 2730 | -3103 | -2141 | -2272 | |

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Appendix "A"

TWT 74 BLOW 60

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-----|-------|-------|------|-----|-----|------|------|
| 972 | 1172 | 2 | 9948 | 4 | 473 | 4 | 4 | 4 | 4 |
| 1020 | 1349 | | 10339 | 1742 | - | 56 | - | 25 | 6 |
| 1044 | 1562 | | 10738 | 1687 | - | 291 | - | 1632 | 1751 |
| 1070 | 1784 | | 11180 | 1696 | - | 137 | - | 81 | 32 |
| 1094 | 1992 | | 11621 | 1624 | - | 54 | - | 99 | 24 |
| | | | | 1675 | - | 164 | - | 96 | 30 |
| | | | | 122 | - | 123 | - | 38 | 1452 |
| | | | | 1727 | - | 185 | - | 13 | 1441 |
| | | | | 12072 | - | 14 | - | 10 | 1430 |
| | | | | 12465 | 1591 | 309 | 25 | - | 4 |
| | | | | 12771 | 1488 | 449 | 18 | 30 | 1276 |
| | | | | 13170 | 1583 | 594 | 30 | 21 | 1165 |
| | | | | 13603 | 1571 | 717 | - | 54 | 1202 |
| | | | | | | | - | 5 | 1155 |

TWT 74 BLOW 61

CONFIG E29T9C2

TUNNEL CONDITIONS

| | BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|------|-------|-----|------|------|------|------|-------|------|
| DEC= | 2 | 2 | 3 | 1998 | 1417 | 5610 | 7192 | 20096 | 5211 |
| 832 | 1178 | | | 1998 | 1420 | 5623 | 7209 | 20145 | 5211 |
| 883 | 1352 | | | 1998 | 1420 | 5627 | 7214 | 20158 | 5213 |
| 908 | 1569 | | | 1998 | 1422 | 5630 | 7218 | 20170 | 5211 |
| 934 | 1791 | | | 1998 | 1423 | 5636 | 7225 | 20189 | 5211 |
| 958 | 2000 | | | 1998 | 1423 | | | | |
| 983 | 2214 | | | 1998 | 1422 | 5631 | 7220 | 20174 | 5211 |
| 1011 | 2450 | | | 1998 | 1421 | 5626 | 7212 | 20154 | 5211 |
| 1038 | 2675 | | | 1998 | 1419 | 5619 | 7204 | 20130 | 5211 |
| 1064 | 2896 | | | 1998 | 1420 | 5619 | 7204 | 20131 | 5209 |
| 1091 | 3122 | | | 1998 | 1420 | 5622 | 7207 | 20140 | 5209 |
| 1118 | 3339 | | | 1998 | 1421 | 5624 | 7210 | 20147 | 5209 |

TWT 74 BLOW 61
CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|-----|-------|------|-----|-----|-------|-------|--------|---------------|
| 832 | 1178 | 2 | 9264 | 3895 | - | 108 | 8 | 5094 | -98734 | -868 - 1984 |
| 883 | 1352 | | 9362 | 4170 | - | 124 | 17 | 4451 | -2136 | -1597 - 1856 |
| 908 | 1569 | | 9582 | 4594 | - | 140 | 16 | 4074 | -1986 | -1806 - 1872 |
| 934 | 1791 | | 9694 | 5108 | - | 165 | - | 3773 | -5313 | -1894 - 1927 |
| 958 | 2000 | | 9879 | 5640 | - | 100 | 6 | 3489 | -2451 | -1966 - 1968 |
| 983 | 2214 | | 10177 | 6236 | - | 51 | - | 9 | 3388 | -3685 - 2051 |
| 1011 | 2450 | | 10433 | 6798 | - | 16 | - | 4 | 3235 | -793 - 2112 |
| 1038 | 2675 | | 10564 | 7329 | - | 35 | - | 8 | 3010 | -10752 - 2170 |
| 1064 | 2896 | | 10414 | 8009 | - | 40 | - | 9 | 2704 | -4747 - 2162 |
| 1091 | 3122 | | 10426 | 8547 | - | 28 | - | 12 | 2553 | -52250 - 2190 |
| 1118 | 3339 | | 10541 | 9088 | - | 36 | - | 14 | 2541 | -20621 - 2214 |

TWT 74 BLOW 61

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | L/D |
|------|-------|-------|------|------|------|------|-----|------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 |
| 832 | 1178 | 9864 | 1923 | -402 | -11 | -108 | -14 | 1949 |
| 883 | 1352 | 10078 | 1865 | -186 | 241 | 116 | 46 | 1850 |
| 908 | 1569 | 10468 | 1832 | -64 | 279 | 130 | 53 | 1750 |
| 934 | 1791 | 10795 | 1879 | -40 | -198 | -154 | -58 | 1740 |
| 958 | 2000 | 11212 | 1921 | 168 | 183 | 92 | 40 | 1714 |
| 983 | 2214 | 11777 | 1940 | 216 | -76 | -44 | -27 | 1647 |
| 1011 | 2450 | 12312 | 1860 | 310 | 41 | 16 | 3 | 1511 |
| 1038 | 2675 | 12732 | 1790 | 469 | 25 | 35 | 9 | 1406 |
| 1064 | 2896 | 12990 | 1965 | 708 | 52 | 39 | 11 | 1513 |
| 1091 | 3122 | 13346 | 1906 | 855 | 5 | 30 | 4 | 1428 |
| 1118 | 3339 | 13802 | 1786 | 895 | 15 | 38 | 8 | 1294 |

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TWT 74 BLOW 62

CONFIG E23T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|-----|-------|------|------|------|-------|------|
| 755 | 2 | 2 | 1.998 | 1405 | 5614 | 7197 | 20111 | 5245 |
| 807 | 1169 | | 1.998 | 1406 | 5625 | 7212 | 20153 | 5251 |
| 832 | 1360 | | 1.998 | 1405 | 5620 | 7206 | 20135 | 5249 |
| 858 | 1581 | | 1.998 | 1402 | 5611 | 7194 | 20102 | 5251 |
| 882 | 1803 | | 1.998 | 1405 | 5621 | 7207 | 20138 | 5251 |
| 882 | 2009 | | 1.998 | 1405 | 5621 | 7207 | 20138 | 5251 |
| 908 | 2232 | | 1.998 | 1407 | 5625 | 7211 | 20150 | 5247 |
| 933 | 2443 | | 1.998 | 1407 | 5625 | 7212 | 20152 | 5247 |
| 960 | 2670 | | 1.998 | 1409 | 5628 | 7215 | 20161 | 5244 |
| 987 | 2896 | | 1.998 | 1407 | 5622 | 7208 | 20142 | 5244 |
| 1012 | 3104 | | 1.998 | 1408 | 5623 | 7209 | 20144 | 5244 |
| 1039 | 3327 | | 1.998 | 1409 | 5619 | 7203 | 20129 | 5239 |
| 1082 | 3568 | | 1.998 | 1407 | 5609 | 7192 | 20096 | 5237 |

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TWT 74 BLOW 62
CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|------|-----|-----|-------|--------|-------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 755 | 1169 | 8485 | 3303 | 2 | 8 | 4701 | 4072 | -1131 | -1553 |
| 807 | 1360 | 8671 | 3788 | 10 | 6 | 4309 | 5620 | -1721 | -1632 |
| 832 | 1581 | 8741 | 4267 | 11 | 1 | 3867 | -17860 | -1868 | -1650 |
| 858 | 1803 | 8933 | 4795 | 6 | 4 | 3463 | 4354 | -1921 | -1661 |
| 882 | 2009 | 9035 | 5313 | 3 | 5 | 3256 | 2229 | -1971 | -1730 |
| 908 | 2232 | 9221 | 5910 | 5 | 8 | 3053 | 4832 | -2019 | -1804 |
| 933 | 2443 | 9288 | 6495 | 14 | 9 | 2862 | 12580 | -2074 | -1859 |
| 960 | 2670 | 9253 | 7164 | 15 | 10 | 2680 | -16836 | -2134 | -1920 |
| 987 | 2896 | 9296 | 7845 | 22 | 13 | 2525 | -14011 | -2160 | -1981 |
| 1012 | 3104 | 9249 | 8483 | 26 | 11 | 2442 | -4172 | -2180 | -2071 |
| 1039 | 3327 | 9066 | 9084 | 35 | 14 | 2335 | -39816 | -2206 | -2121 |
| 1082 | 3568 | 9084 | 9778 | 44 | 17 | 2211 | 2619 | -2176 | -2162 |

TWT 74 BLOW 62

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-------|------|------|-----|----|-----|------|------|
| DEC | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 755 | 1169 | 8978 | 1516 | - | 183 | 24 | - | 4 | 8 |
| 807 | 1360 | 9319 | 1643 | - | 108 | 39 | - | 11 | 3 |
| 832 | 1581 | 9573 | 1724 | 22 | - | 5 | - | 11 | - |
| 858 | 1803 | 9979 | 1796 | 179 | - | 44 | - | 7 | 2 |
| 882 | 2009 | 10311 | 1886 | 270 | - | 42 | - | 1 | 6 |
| 908 | 2232 | 10775 | 1966 | 384 | - | 28 | - | 8 | 5 |
| 933 | 2443 | 11143 | 2071 | 509 | - | 15 | - | 17 | - |
| 960 | 2670 | 11485 | 2243 | 648 | - | 8 | - | 18 | - |
| 987 | 2896 | 11932 | 2363 | 794 | 13 | 26 | - | 26 | 1980 |
| 1012 | 3104 | 12299 | 2498 | 894 | 37 | 28 | 4 | 31 | 2031 |
| 1039 | 3327 | 12563 | 2622 | 1018 | 8 | 37 | 7 | 2087 | |
| 1082 | 3568 | 13082 | 2644 | 1187 | - | 4 | 46 | 12 | 2021 |

TWT 74 BLOW 63

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|-------|-----|------|------|------|------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | | | 1 | 1 |
| 1016 | 1150 | | 1998 | 1383 | 5603 | 7183 | 20072 | 5297 |
| 1061 | 1324 | | 1998 | 1387 | 5601 | 7180 | 20064 | 5285 |
| 1086 | 1541 | | 1998 | 1393 | 5613 | 7197 | 20110 | 5278 |
| 1115 | 1786 | | 1998 | 1400 | 5632 | 7220 | 20177 | 5271 |
| 1143 | 2021 | | 1998 | 1397 | 5614 | 7198 | 20113 | 5266 |
| 1168 | 2233 | | 1998 | 1402 | 5622 | 7208 | 20142 | 5259 |
| 1193 | 2443 | | 1998 | 1402 | 5621 | 7207 | 20138 | 5257 |
| 1219 | 2665 | | 1998 | 1405 | 5623 | 7209 | 20146 | 5251 |
| 1249 | 2917 | | 1998 | 1407 | 5624 | 7210 | 20147 | 5245 |
| 1282 | 3187 | | 1998 | 1408 | 5621 | 7206 | 20137 | 5242 |
| 1309 | 3410 | | 1998 | 1409 | 5619 | 7204 | 20131 | 5237 |

TWT 74 BLOW 63

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | 4 |
|------|-------|-------|------|----|-----|-----|-------|-------|--------|-------|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1016 | 1150 | 9363 | 3874 | - | 32 | 12 | 5140 | 12377 | - | 50 | -1991 |
| 1061 | 1324 | 9669 | 4139 | - | 77 | 2 | 4615 | -4006 | -1027 | -1910 | |
| 1086 | 1541 | 9760 | 4611 | - | 37 | 5 | 4129 | 69260 | -1332 | -1904 | |
| 1115 | 1786 | 9881 | 5173 | - | 87 | 8 | 3680 | -1641 | -1904 | | |
| 1143 | 2021 | 10271 | 5833 | - | 15 | 2 | 3481 | 10747 | -1800 | -2031 | |
| 1168 | 2233 | 10552 | 6382 | 9 | | | 3296 | -18 | -1901 | -2104 | |
| 1193 | 2443 | 10896 | 6892 | 1 | | | 4 | 3161 | 3536 | -2015 | -2179 |
| 1219 | 2665 | 11119 | 7415 | | 42 | | 7 | 2922 | -20754 | -2090 | -2167 |
| 1249 | 2917 | 11127 | 8110 | | 32 | | 10 | 2721 | -28315 | -2094 | -2207 |
| 1282 | 3187 | 11193 | 8746 | | 25 | | 11 | 2594 | 36738 | -2180 | -2269 |
| 1309 | 3410 | 11013 | 9202 | | 25 | | 12 | 2475 | -17479 | -2136 | -2278 |

TWT 74 BLOW 63

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

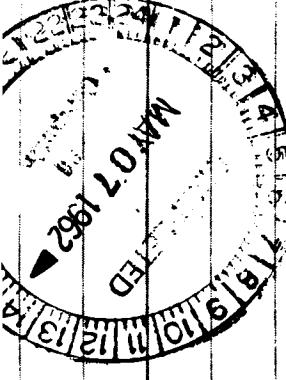
| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-----|-------|------|-----|-----|-----|-----|------|
| DEC= | | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1016 | 1150 | | 9947 | 1930 | 411 | 35 | - | 34 | 1940 |
| 1061 | 1324 | | 10360 | 1814 | 236 | 109 | - | 75 | 1751 |
| 1086 | 1541 | | 10634 | 1852 | 84 | 6 | - | 38 | 1741 |
| 1115 | 1786 | | 10991 | 1894 | 91 | 2 | - | 85 | 1723 |
| 1143 | 2021 | | 11654 | 1925 | 181 | 20 | - | 15 | - |
| 1168 | 2233 | | 12185 | 1895 | 286 | 29 | 8 | 4 | 1555 |
| 1193 | 2443 | | 12771 | 1768 | 379 | 20 | 2 | 3 | 1384 |
| 1219 | 2665 | | 13264 | 1640 | 559 | 18 | 41 | 13 | 1236 |
| 1249 | 2917 | | 13669 | 1658 | 729 | 10 | 33 | 7 | 1213 |
| 1282 | 3187 | | 14123 | 1518 | 862 | 2 | 27 | 3 | 1075 |
| 1309 | 3410 | | 14279 | 1444 | 983 | 12 | 27 | 4 | 1012 |

TWT 74 BLOW 64

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | P0 | Q | TTO |
|------|-------|-----|------|------|------|------|-------|-------|
| 1284 | 922 | 2 | 3 | 1393 | 1395 | 5612 | 7194 | 20104 |
| 1337 | 1104 | | 1998 | 1400 | 5616 | 7200 | 20120 | 5261 |
| 1364 | 1328 | | 1998 | 1403 | 5625 | 7212 | 20152 | 5257 |
| 1391 | 1545 | | 1998 | 1408 | 5635 | 7224 | 20187 | 5251 |
| 1418 | 1759 | | 1998 | 1405 | 5621 | 7207 | 20138 | 5251 |
| 1445 | 1975 | | 1998 | 1407 | 5622 | 7208 | 20141 | 5245 |
| 1472 | 2187 | | 1998 | 1409 | 5627 | 7214 | 20158 | 5244 |
| 1499 | 2396 | | 1998 | 1409 | 5619 | 7203 | 20129 | 5239 |
| 1528 | 2619 | | 1998 | 1410 | 5619 | 7203 | 20129 | 5235 |
| 1556 | 2838 | | 1998 | 1415 | 5630 | 7219 | 20171 | 5230 |
| 1584 | 3049 | | 1998 | 1412 | 5618 | 7203 | 20128 | 5230 |
| 1612 | 3260 | | 1998 | 1416 | 5625 | 7212 | 20153 | 5223 |
| 1642 | 3483 | | 1998 | 1415 | 5616 | 7200 | 20119 | 5220 |



TWT 74 BLOW 64

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA | |
|-------------------------|-------|-------|------|----|-----|------|-------|-------|-------------|-------------|-------------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 1284 | 922 | 8854 | 3553 | - | 16 | 12 | 5846 | 5673 | - | 514 - 2077 | |
| 1337 | 1104 | 9368 | 3834 | - | 34 | 20 | 5226 | 9533 | - | 1437 - 2003 | |
| 1364 | 1328 | 9592 | 4144 | 13 | 4 | 4603 | 7479 | - | 1684 - 1907 | | |
| 1391 | 1545 | 9709 | 4558 | 7 | 1 | 4067 | 1812 | - | 1899 - 1854 | | |
| 1418 | 1759 | 9940 | 5116 | - | 1 | 8 | 3681 | 3126 | - | 1981 - 1883 | |
| 1445 | 1975 | 10131 | 5678 | 7 | 6 | 3504 | - | 408 | - | 2005 - 1989 | |
| 1472 | 2187 | 10509 | 6245 | - | 9 | - | 3 | 3324 | 1725 | - | 2065 - 2076 |
| 1499 | 2396 | 10832 | 6780 | 5 | 2 | 3176 | 6927 | - | 2098 - 2153 | | |
| 1528 | 2619 | 11085 | 7243 | 20 | - | 3 | 2982 | 12318 | - | 2193 - 2160 | |
| 1556 | 2838 | 10685 | 8101 | 34 | - | 11 | 3029 | 20277 | - | 2211 - 2454 | |
| 1584 | 3049 | 11199 | 8454 | 18 | - | 14 | 2650 | 7074 | - | 2208 - 2241 | |
| 1612 | 3260 | 11269 | 8896 | 39 | - | 13 | 2553 | 27324 | - | 2226 - 2271 | |
| 1642 | 3483 | 10997 | 9298 | 33 | - | 14 | 2443 | 28244 | - | 2180 - 2272 | |
| CONFIDENTIAL | | | | | | | | | | | |
| -166- | | | | | | | | | | | |

TWT 74 BLOW 64

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO.

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|--------|-------|--------|------|------|-----|----|-----|------|------|
| DEC= 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1284 | 922 | 9309 | 2087 | 616 | 61 | 18 | 9 | 2242 | |
| 1337 | 1104 | 9929 | 1968 | 435 | 52 | 37 | 14 | 1982 | |
| 1364 | 1328 | 10287 | 1830 | 235 | 29 | 12 | 7 | 1779 | |
| 1391 | 1545 | 10573 | 1605 | 52 | 55 | 7 | 1 | 1708 | |
| 1418 | 1759 | 11021 | 1872 | 97 | 60 | 3 | 8 | 1699 | |
| 1445 | 1975 | 111454 | 1920 | 169 | 22 | 5 | 8 | 1676 | |
| 1472 | 2187 | 12079 | 1882 | 271 | 69 | 7 | 6 | 1558 | |
| 1499 | 2396 | 12652 | 1797 | 369 | 14 | 4 | 4 | 1420 | |
| 1528 | 2619 | 13144 | 1606 | 512 | 21 | 19 | 6 | 1221 | |
| 1556 | 2838 | 13252 | 2047 | 460 | 20 | 35 | 7 | 1545 | |
| 1584 | 3049 | 13940 | 1602 | 802 | 43 | 22 | - | 3 | 1149 |
| 1612 | 3260 | 14287 | 1423 | 908 | 16 | 39 | 10 | 996 | |
| 1642 | 3483 | 14337 | 1351 | 1017 | 13 | 35 | 7 | 942 | |

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Appendix "A"

TWT 74 BLOW 65

CONFIG E32T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|-------|-----|------|------|------|------|-------|------|
| DEC | 2 | 2 | 3 | 2 | | 1 | 1 | 1 |
| 787 | -793 | | 1998 | 1403 | 5616 | 7200 | 20119 | 5251 |
| 808 | -639 | | 1998 | 1406 | 5622 | 7208 | 20142 | 5247 |
| 822 | -535 | | 1998 | 1402 | 5602 | 7182 | 20069 | 5245 |
| 838 | -416 | | 1998 | 1405 | 5614 | 7197 | 20111 | 5244 |
| 853 | -309 | | 1998 | 1409 | 5624 | 7210 | 20147 | 5242 |
| 867 | -208 | | 1998 | 1406 | 5613 | 7196 | 20107 | 5242 |
| 881 | -112 | | 1998 | 1408 | 5617 | 7202 | 20124 | 5239 |
| 897 | | | 1998 | 1410 | 5623 | 7208 | 20143 | 5237 |
| 909 | 84 | | 1998 | 1409 | 5618 | 7202 | 20125 | 5237 |
| 927 | 210 | | 1998 | 1408 | 5610 | 7192 | 20097 | 5233 |
| 941 | 308 | | 1998 | 1415 | 5637 | 7228 | 20196 | 5233 |
| 957 | 421 | | 1998 | 1413 | 5624 | 7210 | 20147 | 5230 |
| 971 | 518 | | 1998 | 1411 | 5615 | 7199 | 20116 | 5230 |
| 988 | 634 | | 1998 | 1416 | 5633 | 7222 | 20180 | 5228 |
| 1002 | 730 | | 1998 | 1416 | 5629 | 7217 | 20166 | 5225 |
| 1017 | 833 | | 1998 | 1417 | 5628 | 7215 | 20162 | 5229 |
| 1032 | 938 | | 1998 | 1416 | 5624 | 7210 | 20147 | 5223 |
| 1047 | 1039 | | 1998 | 1416 | 5625 | 7211 | 20150 | 5223 |

TWT 74 BLOW 65

CONFIG E32T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) / Q

| | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|------|-------|------|------|------|-----|-----|-------|--------|-------|-----|
| DEC= | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 787 | - | 793 | 8332 | - | 2223 | 50 | - | 1 | 6555 | 11059 | - |
| 808 | - | 639 | 7805 | - | 1632 | 50 | - | 2 | 7094 | 11359 | - |
| 822 | - | 535 | 7469 | - | 1231 | 60 | - | 2 | 7788 | 12881 | - |
| 838 | - | 416 | 7185 | - | 766 | 50 | - | 2 | 9465 | 13661 | - |
| 853 | - | 309 | 7321 | - | 414 | 56 | - | 3 | 12791 | 11498 | - |
| 867 | - | 208 | 7260 | - | 171 | 57 | - | 3 | 22214 | 10743 | - |
| 881 | - | 112 | 6973 | 52 | | 45 | - | 3 | -36397 | 11880 | - |
| 897 | | | 6562 | 454 | | 38 | - | 3 | 3908 | 10767 | - |
| 909 | 84 | | 6631 | 838 | | 17 | - | 2 | 6407 | 21015 | - |
| 927 | 210 | | 6461 | 1597 | | 29 | - | 2 | 7895 | 32903 | - |
| 941 | 308 | | 6934 | 2047 | | 63 | - | 4 | 7893 | 28506 | - |
| 957 | 421 | | 7393 | 2441 | | 29 | - | 4 | 7578 | 41488 | - |
| 971 | 518 | | 7794 | 2741 | | 6 | - | 3 | 7273 | 856 | - |
| 988 | 634 | | 8245 | 3047 | | 7 | - | 3 | 6902 | 6233 | - |
| 1002 | 730 | | 8551 | 3252 | | 14 | - | 3 | 6612 | 11293 | - |
| 1017 | 833 | | 8852 | 3467 | | 11 | - | 2 | 6344 | 2892 | - |
| 1032 | 938 | | 9226 | 3654 | | 6 | - | 2 | 5930 | 2164 | - |
| 1047 | 1039 | | 9394 | 3776 | | 10 | - | 3 | 5617 | 915 | - |

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Appendix "A"

TWT 74 BLOW 65

CONFIG E32T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|-----|------|--------|------|------|-----|-----|--------|
| 787 | - 793 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 808 | - 639 | | 8559 | - 1053 | 1127 | - 64 | 50 | - 8 | - 1230 |
| 822 | - 535 | | 7938 | - 753 | 989 | - 60 | 49 | - 8 | - 949 |
| 838 | - 416 | | 7552 | - 528 | 901 | - 62 | 60 | - 8 | - 699 |
| 853 | - 309 | | 7221 | - 243 | 801 | - 48 | 50 | - 5 | - 336 |
| 867 | - 208 | | 7333 | - 19 | 722 | - 67 | 56 | - 6 | - 26 |
| 881 | - 112 | | 7261 | - 93 | 646 | - 74 | 56 | - 5 | - 128 |
| 897 | | | 6971 | 188 | 513 | - 51 | 45 | - 4 | 270 |
| 909 | 84 | | 6562 | 454 | 50 | - 50 | 38 | - 3 | 693 |
| 927 | 210 | | 6643 | 741 | 18 | - 10 | 17 | - 2 | 1115 |
| 941 | 308 | | 6516 | 1359 | 476 | - 10 | 29 | - 1 | 2086 |
| 957 | 421 | | 7553 | 1892 | 759 | - 7 | 29 | - 2 | 2505 |
| 971 | 518 | | 8010 | 2027 | 791 | - 28 | 7 | - 2 | 2530 |
| 988 | 634 | | 8531 | 2118 | 785 | - 22 | 7 | - 3 | 2483 |
| 1002 | 730 | | 8895 | 2139 | 754 | - 18 | 14 | - 5 | 2405 |
| 1017 | 833 | | 9260 | 2148 | 723 | - 50 | 2 | - 2 | 2320 |
| 1032 | 938 | | 9698 | 2102 | 615 | 63 | 6 | - 1 | 2167 |
| 1047 | 1039 | | 9921 | 2021 | 524 | 47 | 11 | - 1 | 2037 |

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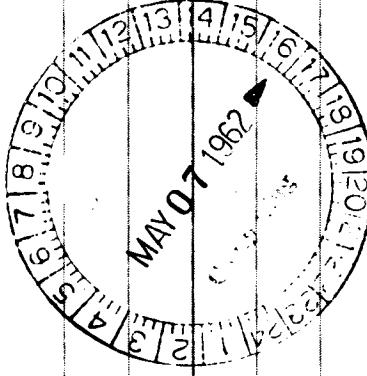
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Appendix "A"

TWT 74 BLOW 66

CONFIG E25T9C2

TUNNEL CONDITIONS

| BIN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|--------|------|------|------|------|-------|------|-----|
| DEC= | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 603 | - 1013 | 1998 | 1403 | 5622 | 7208 | 20142 | 5256 | |
| 677 | - 649 | 1998 | 1405 | 5618 | 7203 | 20128 | 5247 | |
| 690 | - 536 | 1998 | 1403 | 5609 | 7191 | 20095 | 5247 | |
| 704 | - 419 | 1998 | 1409 | 5630 | 7218 | 20169 | 5245 | |
| 716 | - 320 | 1998 | 1406 | 5619 | 7204 | 20130 | 5245 | |
| 729 | - 213 | 1998 | 1409 | 5627 | 7214 | 20157 | 5242 | |
| 742 | - 106 | 1998 | 1409 | 5626 | 7212 | 20154 | 5242 | |
| 756 | 7 | 1998 | 1410 | 5623 | 7209 | 20143 | 5239 | |
| 769 | 113 | 1998 | 1412 | 5633 | 7222 | 20181 | 5240 | |
| 783 | 224 | 1998 | 1408 | 5618 | 7202 | 20126 | 5239 | |
| 796 | 330 | 1998 | 1410 | 5623 | 7209 | 20143 | 5237 | |
| 810 | 443 | 1998 | 1411 | 5624 | 7210 | 20149 | 5237 | |
| 823 | 548 | 1998 | 1411 | 5620 | 7205 | 20132 | 5233 | |
| 837 | 662 | 1998 | 1411 | 5620 | 7205 | 20135 | 5233 | |
| 850 | 768 | 1998 | 1412 | 5620 | 7205 | 20135 | 5232 | |
| 863 | 869 | 1998 | 1412 | 5621 | 7206 | 20137 | 5230 | |
| 877 | 978 | 1998 | 1411 | 5617 | 7202 | 20124 | 5230 | |



TWT 74 BLOW 66

CONFIG E25T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC) /Q

| | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|----|-------|------|----|------|-----|-----|-------|-------|-------|-----|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 603 | - | 1013 | 9206 | - | 3511 | 41 | - | 1 | 6172 | 7186 | - |
| 677 | - | 649 | 7996 | - | 2491 | 46 | - | 1 | 7083 | 9162 | - |
| 690 | - | 536 | 7637 | - | 2064 | 59 | - | 2 | 7543 | 9372 | - |
| 704 | - | 419 | 7205 | - | 1655 | 55 | - | 2 | 8120 | 10610 | - |
| 716 | - | 320 | 6979 | - | 1318 | 67 | - | 2 | 8667 | 11019 | - |
| 729 | - | 213 | 6654 | - | 986 | 79 | - | 3 | 9281 | 11326 | - |
| 742 | - | 106 | 6129 | - | 569 | 67 | - | 2 | 9547 | 10547 | - |
| 756 | - | 7 | 5865 | - | 145 | 77 | - | 3 | 10480 | 15293 | - |
| 769 | - | 113 | 6314 | - | 654 | 57 | - | 2 | 10076 | 20236 | - |
| 783 | - | 224 | 6724 | - | 1008 | 20 | - | 1 | 9295 | 57455 | - |
| 796 | - | 330 | 7058 | - | 1357 | 5 | - | 1 | 8599 | 1348 | - |
| 810 | - | 443 | 7356 | - | 1726 | 3 | - | 1 | 7949 | 3611 | - |
| 823 | - | 548 | 7771 | - | 2113 | 8 | - | 1 | 7435 | 4851 | - |
| 837 | - | 662 | 8206 | - | 2550 | 7 | - | 1 | 6946 | 5072 | - |
| 850 | - | 768 | 8588 | - | 2898 | 6 | - | 2 | 6607 | 11102 | - |
| 863 | - | 869 | 8969 | - | 3207 | 14 | - | 1 | 6403 | 6202 | - |
| 877 | - | 978 | 9343 | - | 3485 | 24 | - | 2 | 6088 | 12062 | - |

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TWT 74 BLOW 66

CONFIG E25T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|-----|---------|-----|-------|---------|--------|--------|------|-----|----------|
| 603 | - 101.3 | 2 | 9.680 | - 1.837 | 1.472 | - 1.00 | 40 | - | 8 - 1898 |
| 677 | - 64.9 | | 8.226 | - 1.571 | 1.335 | - 7.7 | 46 | - | 6 - 1910 |
| 690 | - 53.6 | | 7.797 | - 1.342 | 1.246 | - 9.5 | 59 | - | 8 - 1721 |
| 704 | - 41.9 | | 7.396 | - 1.124 | 1.142 | - 7.4 | 55 | - | 6 - 1538 |
| 716 | - 32.0 | | 7.042 | - 9.26 | 1.036 | - 8.6 | 67 | - | 6 - 1215 |
| 729 | - 21.3 | | 6.686 | - 7.38 | 8.99 | - 9.7 | 79 | - | 6 - 1104 |
| 742 | - 10.6 | | 6.139 | - 4.56 | 6.35 | - 9.1 | 67 | - | 3 - 743 |
| 756 | - 7 | | 5.865 | 1.38 | 1.51 | - 6.3 | 77 | - | 2 - 236 |
| 769 | - 11.3 | | 6.323 | 5.29 | - 1.76 | - 3.3 | 57 | - | 1 - 837 |
| 783 | 22.4 | | 5.758 | 7.44 | - 3.25 | - 3 | 20 | - | 1 - 1101 |
| 796 | 33.0 | | 7.125 | 9.49 | - 4.31 | - 30 | 5 | - | 1332 |
| 810 | 44.3 | | 7.467 | 1.153 | - 5.07 | - 5.5 | - 3 | - | 1 - 1544 |
| 823 | 54.8 | | 7.938 | 1.361 | - 5.67 | - 4.5 | - 8 | - | 1 - 1715 |
| 837 | 66.2 | | 8.446 | 1.586 | - 6.10 | - 3.5 | - 7 | - | 1 - 1878 |
| 850 | 76.8 | | 8.898 | 1.725 | - 6.28 | - 7 | - 6 | - | 3 - 1938 |
| 863 | 86.9 | | 9.351 | 1.814 | - 6.53 | - 4.4 | - 13 | - | 3 - 1940 |
| 877 | 97.8 | | 9.799 | 1.848 | - 6.18 | - 2.7 | - 23 | - | 6 - 1886 |

TWT 74 BLOW 67

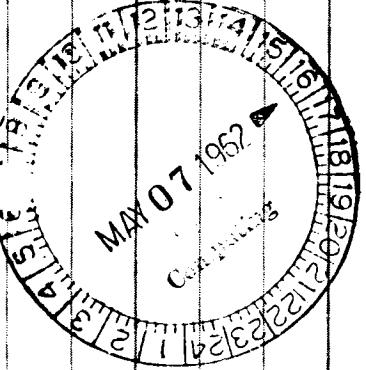
CONFIG E29T9C2

TUNNEL CONDITIONS

| BN | ALPHA | YAW | MACH | RN | H0 | P0 | Q | TTO |
|------|-------|------|------|------|------|------|-------|------|
| DEC= | 2 | 2 | 3 | 2 | 1 | 1 | 1 | 1 |
| 585 | - | 1022 | 1998 | 1395 | 5616 | 7200 | 20120 | 5273 |
| 667 | - | 639 | 1998 | 1400 | 5628 | 7215 | 20162 | 5268 |
| 680 | - | 530 | 1998 | 1397 | 5614 | 7198 | 20114 | 5266 |
| 694 | - | 415 | 1998 | 1400 | 5627 | 7214 | 20159 | 5266 |
| 708 | - | 300 | 1998 | 1404 | 5637 | 7227 | 20196 | 5264 |
| 721 | - | 194 | 1998 | 1396 | 5606 | 7187 | 20082 | 5264 |
| 735 | - | 78 | 1998 | 1405 | 5643 | 7235 | 20217 | 5264 |
| 748 | - | 27 | 1998 | 1401 | 5624 | 7210 | 20147 | 5261 |
| 762 | - | 141 | 1998 | 1405 | 5639 | 7229 | 20201 | 5261 |
| 776 | - | 254 | 1998 | 1406 | 5639 | 7229 | 20201 | 5259 |
| 789 | - | 358 | 1998 | 1403 | 5626 | 7213 | 20156 | 5259 |
| 804 | - | 478 | 1998 | 1406 | 5637 | 7226 | 20193 | 5257 |
| 819 | - | 597 | 1998 | 1401 | 5616 | 7200 | 20119 | 5257 |
| 833 | - | 709 | 1998 | 1403 | 5623 | 7209 | 20146 | 5256 |
| 847 | - | 819 | 1998 | 1405 | 5623 | 7209 | 20145 | 5251 |
| 860 | - | 919 | 1998 | 1405 | 5622 | 7208 | 20141 | 5251 |
| 876 | - | 1031 | 1998 | 1406 | 5625 | 7212 | 20152 | 5251 |

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Appendix "A"



TWT 74 BLOW 67
CONFIG E29T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| | BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|------|-------|------|-------|-----|------|-------|-------|-------|-------|-----|
| DEC= | | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 585 | - | 1022 | 8772 | -3400 | 70 | 6155 | 14511 | -1610 | 2093 | | |
| 667 | - | 639 | 7722 | -2239 | 44 | 1 | 7102 | 15384 | -2045 | 1590 | |
| 680 | - | 530 | 7438 | -1843 | 45 | 7450 | 12267 | -2037 | 1373 | | |
| 694 | - | 415 | 7181 | -1431 | 57 | 4 | 7883 | 9463 | -2013 | 1128 | |
| 708 | - | 300 | 6839 | -1023 | 55 | 3 | 8593 | 11235 | -2036 | 879 | |
| 721 | - | 194 | 6610 | -615 | 70 | 4 | 9066 | 11983 | -2054 | 557 | |
| 735 | - | 78 | 6272 | 66 | 68 | 3 | 12169 | 17495 | -2029 | -80 | |
| 748 | - | 27 | 6444 | 636 | 84 | 4 | 8914 | 18069 | -2028 | -567 | |
| 762 | 141 | | 6698 | 1185 | 52 | 3 | 8200 | 30334 | -2016 | -971 | |
| 776 | 254 | | 7038 | 1663 | 35 | 2 | 7821 | 48690 | -2036 | -1301 | |
| 789 | 358 | | 7401 | 2085 | 15 | 2 | 7543 | 4223 | -1997 | -1573 | |
| 804 | 478 | | 7795 | 2461 | 7 | 1 | 7225 | 4642 | -2012 | -1778 | |
| 819 | 597 | | 8143 | 2812 | 15 | 2 | 6917 | 7672 | -2026 | -1946 | |
| 833 | 709 | | 8418 | 3086 | 26 | 1 | 6656 | 8646 | -1993 | -2054 | |
| 847 | 819 | | 8711 | 3337 | 53 | 4 | 6310 | 17409 | -1992 | -2106 | |
| 860 | 919 | | 9026 | 3514 | 89 | 3 | 5975 | 54383 | -2008 | -2099 | |
| 876 | 1031 | | 9299 | 3678 | 119 | 4 | 5647 | 2264 | -2028 | -2077 | |

TWT 74 BLOW 67

CONFIG E29T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|--------|-----|------|--------|-------|------|-----|------|--------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 585 | - 1022 | | 9236 | - 1791 | 1412 | - 61 | 69 | - 13 | - 1939 |
| 667 | - 639 | | 7923 | - 1366 | 1228 | - 36 | 43 | - 6 | - 1724 |
| 680 | - 530 | | 7577 | - 1148 | 1123 | - 49 | 45 | - 5 | - 1515 |
| 694 | - 415 | | 7266 | - 908 | 995 | - 90 | 57 | - 8 | - 1249 |
| 708 | - 300 | | 6883 | - 664 | 859 | - 68 | 55 | - 6 | - 965 |
| 721 | - 194 | | 6627 | - 391 | 655 | - 79 | 70 | - 7 | - 590 |
| 735 | - 78 | | 6270 | - 151 | 217 | - 47 | 68 | - 4 | 240 |
| 748 | - 27 | | 6447 | - 606 | 84 | - 56 | 84 | - 3 | 940 |
| 762 | 141 | | 6725 | 1020 | - 305 | - 19 | 52 | - 2 | 1517 |
| 776 | 254 | | 7105 | 1350 | - 470 | - 7 | 35 | - 1 | 1901 |
| 789 | 358 | | 7517 | 1619 | - 594 | - 20 | 15 | - 1 | 2153 |
| 804 | 478 | | 7973 | 1804 | - 664 | - 44 | - 7 | - 2 | 2263 |
| 819 | 597 | | 8391 | 1951 | - 706 | - 34 | 15 | - 3 | 2325 |
| 833 | 709 | | 8734 | 2023 | - 716 | - 47 | 26 | - 4 | 2316 |
| 847 | 819 | | 9097 | 2062 | - 676 | - 5 | 52 | - 12 | 2267 |
| 860 | 919 | | 9472 | 2027 | - 601 | - 16 | 88 | - 17 | 2140 |
| 876 | 1031 | | 9808 | 1954 | - 515 | - 11 | 117 | - 26 | 1992 |

TWT 74 BLOW 68

CONFIG E23T9C2

TUNNEL CONDITIONS

| DEC= | BN | ALPHA | YAW | MACH | RN | HO | PO | Q | TTO |
|------|----|-------|-----|------|------|------|-------|------|-------|
| 685 | - | 988 | 2 | 3 | 3493 | 1381 | 11872 | 1572 | 13427 |
| 735 | - | 915 | 2 | 3 | 3493 | 1381 | 11824 | 1566 | 13373 |
| 748 | - | 802 | 2 | 3 | 3493 | 1383 | 11834 | 1567 | 13384 |
| 759 | - | 705 | 2 | 3 | 3493 | 1384 | 11830 | 1567 | 13379 |
| 771 | - | 599 | 2 | 3 | 3493 | 1384 | 11829 | 1566 | 13379 |
| 782 | - | 499 | 2 | 3 | 3493 | 1386 | 11839 | 1568 | 13390 |
| 796 | - | 373 | 2 | 3 | 3493 | 1386 | 11838 | 1568 | 13388 |
| 808 | - | 267 | 2 | 3 | 3493 | 1386 | 11839 | 1568 | 13390 |
| 819 | - | 168 | 2 | 3 | 3493 | 1386 | 11835 | 1567 | 13385 |
| 832 | - | 55 | 2 | 3 | 3493 | 1389 | 11842 | 1568 | 13393 |
| 845 | - | 59 | 2 | 3 | 3493 | 1387 | 11827 | 1566 | 13376 |
| 858 | - | 175 | 2 | 3 | 3493 | 1389 | 11836 | 1567 | 13386 |
| 871 | - | 289 | 2 | 3 | 3493 | 1390 | 11839 | 1568 | 13390 |
| 882 | - | 386 | 2 | 3 | 3493 | 1389 | 11834 | 1567 | 13384 |
| 895 | - | 499 | 2 | 3 | 3493 | 1391 | 11842 | 1568 | 13393 |
| 907 | - | 601 | 2 | 3 | 3493 | 1390 | 11829 | 1566 | 13379 |
| 919 | - | 707 | 2 | 3 | 3493 | 1392 | 11844 | 1568 | 13395 |
| 931 | - | 811 | 2 | 3 | 3493 | 1389 | 11824 | 1566 | 13373 |
| 943 | - | 911 | 2 | 3 | 3493 | 1391 | 11835 | 1567 | 13385 |
| 955 | - | 1014 | 2 | 3 | 3493 | 1391 | 11830 | 1567 | 13379 |
| 968 | - | 1129 | 2 | 3 | 3493 | 1391 | 11833 | 1567 | 13383 |
| 981 | - | 1242 | 2 | 3 | 3493 | 1392 | 11831 | 1567 | 13380 |
| 994 | - | 1356 | 2 | 3 | 3493 | 1392 | 11832 | 1567 | 13381 |
| 1006 | - | 1457 | 2 | 3 | 3493 | 1393 | 11832 | 1567 | 13382 |
| | | | | | | | | | 5264 |

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TWT 74 BLOW 68

CONFIG E23T9C2

BODY AXES DATA AND BALANCE CHAMBER PRESSURE, (DELTA PBC)/Q

| BN | ALPHA | YAW | CA | CN | CNB | CLB | -XCPN | -XCPY | PBC | CMA |
|------|-------|------|------|----|------|------|-------|--------|--------|------|
| DEC= | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 685 | - | 988 | 6578 | - | 3208 | - | 2 | 5425 | 3135 | 286 |
| 735 | - | 915 | 6433 | - | 2761 | - | 1 | 4245 | 6601 | 32 |
| 748 | - | 802 | 6352 | - | 2578 | - | 1 | 5345 | -16093 | - |
| 759 | - | 705 | 6239 | - | 2358 | - | 1 | 5704 | 6305 | - |
| 771 | - | 599 | 6042 | - | 2174 | 15 | 2 | 6178 | 79368 | - |
| 782 | - | 499 | 5871 | - | 1960 | 12 | 1 | 6548 | i2281 | - |
| 796 | - | 373 | 5723 | - | 1650 | 14 | 2 | 7028 | -9188 | - |
| 808 | - | 267 | 5628 | - | 1330 | 14 | 2 | 7324 | -11958 | - |
| 819 | - | 168 | 5598 | - | 911 | 24 | 1 | 7714 | 29938 | - |
| 832 | - | 55 | 5613 | - | 285 | 24 | 1 | 8046 | -28038 | - |
| 845 | 59 | 5629 | 423 | 10 | 2 | 8280 | 185 | - | 253 | 229 |
| 858 | 175 | 5603 | 1054 | - | 4 | 2 | 7790 | 3854 | - | 350 |
| 871 | 289 | 5702 | 1499 | - | 12 | 2 | 7324 | 4968 | - | 821 |
| 882 | 386 | 5786 | 1745 | - | 16 | 2 | 7127 | 5951 | - | 1098 |
| 895 | 499 | 5913 | 2020 | - | 19 | 2 | 6637 | 5950 | - | 353 |
| 907 | 601 | 6113 | 2216 | - | 18 | 1 | 6268 | 5933 | - | 1244 |
| 919 | 707 | 6299 | 2413 | - | 34 | 1 | 5834 | 8161 | - | 1341 |
| 931 | 811 | 6504 | 2680 | - | 71 | 5540 | 15132 | - | 400 | - |
| 943 | 911 | 6579 | 3060 | - | 41 | 4 | 5609 | -38760 | - | 1485 |
| 955 | 1014 | 6705 | 3337 | - | 53 | 5 | 5470 | -19969 | - | 418 |
| 968 | 1129 | 6814 | 3656 | - | 60 | 4 | 5247 | -52868 | - | 1918 |
| 981 | 1242 | 6997 | 3880 | - | 65 | 4 | 4580 | - | 465 | - |
| 994 | 1356 | 7077 | 4263 | - | 66 | 3 | 4187 | - | 465 | - |
| 1006 | 1457 | 8371 | 4591 | - | 61 | 7 | 4181 | -11057 | - | 1785 |

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Appendix "A"

TWT 74 BLOW 68

CONFIG E23T9C2

STABILITY AXES DATA, DRAG, AND LIFT TO DRAG RATIO

| BN | ALPHA | YAW | CD | CL | CMS | CY | CNS | CLS | L/D |
|------|-------|------|-------|------|------|----|-----|-----|-------|
| DEC= | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 685 | -988 | 7030 | -2032 | 1024 | -109 | - | - | 2 | -2890 |
| 735 | -915 | 6790 | -1703 | 590 | -87 | - | 84 | 12 | -2508 |
| 748 | -802 | 6649 | -1666 | 849 | -19 | - | 36 | 7 | -2506 |
| 759 | -705 | 6481 | -1575 | 880 | -26 | 8 | - | - | -2430 |
| 771 | -599 | 6236 | -1531 | 927 | -2 | 15 | 1 | 1 | -2455 |
| 782 | -499 | 6019 | -1442 | 927 | -13 | 12 | - | - | -2396 |
| 796 | -373 | 5818 | -1274 | 894 | 11 | 14 | 1 | 1 | -2190 |
| 808 | -267 | 5684 | -1066 | 805 | 10 | 15 | 1 | 1 | -1876 |
| 819 | -168 | 5623 | -747 | 664 | -9 | 24 | - | - | -1329 |
| 832 | -55 | 5616 | -231 | 387 | 8 | 24 | 1 | 1 | -411 |
| 845 | 59 | 5633 | 365 | 30 | 33 | 10 | 2 | 2 | 649 |
| 858 | 175 | 5632 | 882 | -244 | 49 | -4 | 2 | 2 | 1565 |
| 871 | 289 | 5770 | 1210 | -377 | 64 | - | 12 | 2 | 2096 |
| 882 | 386 | 5890 | 1351 | -442 | 71 | - | 16 | - | 2294 |
| 895 | 499 | 6066 | 1498 | -447 | 67 | - | 19 | - | 2469 |
| 907 | 601 | 6312 | 1564 | -425 | 64 | - | 18 | 1 | 2478 |
| 919 | 707 | 6549 | 1619 | -374 | 67 | - | 34 | 3 | 2473 |
| 931 | 811 | 6817 | 1736 | -358 | 60 | - | 71 | 10 | 2547 |
| 943 | 911 | 6981 | 1980 | -468 | 10 | - | 40 | 10 | 2836 |
| 955 | 1014 | 7188 | 2104 | -484 | 23 | - | 52 | 14 | 2928 |
| 968 | 1129 | 7398 | 2251 | -472 | 11 | - | 58 | 15 | 3043 |
| 981 | 1242 | 7668 | 2284 | -253 | 3 | - | 63 | 18 | 2979 |
| 994 | 1356 | 7879 | 2485 | -137 | 2 | - | 63 | 19 | 3154 |
| 1006 | 1457 | 9256 | 2338 | -112 | 43 | - | 58 | 22 | 2526 |

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Appendix "A"



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APPENDIX B

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Appendix "B"

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DATA REDUCTION EQUATIONS

The data reduction program was written to provide aerodynamic force and moment data in the body and stability axes system.

General six component force data was measured by the revised 2-3/4" Task Mk IA internal balance. Data reduction equations for obtaining force and moment data are presented in Reference (a).

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FULL SCALE DIMENSIONS AND NOMENCLATURE

Model factor - 0.105

Command Module, C2 (Dwg. No. 7121-01077)

| | |
|------------------------------------|-------|
| Maximum diameter, in. | 154.0 |
| Radius of spherical blunt end, in. | 184.0 |
| Corner radius, in. | 7.7 |
| Nose cone semi-angle, deg. | 33.0 |
| Nose cone vertex radius, in. | 9.15 |

Tower Structure, T9 (Dwg. No. 7121-01079)

| | |
|-----------------------------------------------------------|--------|
| Total length, in. | 114.51 |
| Number of longitudinal members | 4 |
| Diameter of longitudinal members, in. | 3.57 |
| Diameter of cross braces, in. | 2.38 |
| Distance between attachment points at command module, in. | 46.752 |
| Distance between attachment points at escape motor, in. | 29.905 |

Escape Motor, E12 (Dwg. No. 7121-01080)

Escape rocket motor having included in the fwd. section two jettison motor nozzle at 30° to escape motor \mathbf{f} and flush with escape motor outer \mathbf{M} . half angle of nozzle of 15°

| | |
|---------------------------------------|--------|
| Total length | 226.91 |
| Length of forward jettison motor, in. | 48.00 |
| Diameter escape motor, in. | 26.00 |
| Diameter escape motor hose, in. | 52.00 |
| Skirt flare angle, deg. | 30.0 |
| Nose radius, in. | 5.2 |

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FULL SCALE DIMENSIONS AND NOMENCLATURE - continued

Escape Motor, E23 (Dwg. No. 7121-01051)

| | |
|----------------------------------------------------------------------|--------|
| Escape rocket motor-total length, including fwd. jettison motor, in. | 254.88 |
| Length of forward jettison motor, in. | 48.00 |
| Diameter escape motor, in. | 26.00 |
| Diameter of escape rocket hose, in. | 51.85 |
| Skirt flare angle, deg. | 34.0 |
| Nose radius, in. | 2.0 |
| Circular disc attached to escape rocket hose, thickness of disc, in. | 2.5 |
| Diameter of disc, in. | 65.0 |
| Ring fwd. of flare skirt, in. | 28.95 |

Escape Motor, E25 (Dwg. No. 7121-01051)

| | |
|-------------------------------|-------|
| (Same as E23 except) | |
| Diameter of disc, in. | 91.0 |
| Ring fwd. of flare skirt, in. | 29.85 |

Escape Motor, E29 (Dwg. No. 7121-01051)

| | |
|-----------------------------------------|------|
| (Same as E25 except) | |
| Height of clipped position of disc, in. | 19.5 |

Escape Motor, E32 (Dwg. No. 7121-01051)

| | |
|--------------------------------------------------------------------------------------------------------------------------|------|
| (Same as E25 except) | |
| Eccentric circular disc attached to escape rocket base, distance from center of disc to center line of rocket motor, in. | 10.4 |

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| 1. Configuration: (E12T9C2) | |
| M = 1.5 | 11a-g |
| 2. Configuration: (E23T9C2) | |
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| M = 0.9 | 13a-g |
| M = 1.2 | 14a-g |
| M = 1.5 | 15a-g |
| M = 2.0 | 16a-g |
| M = 3.5 | 17a-g |
| 3. Configuration: (E25T9C2) | |
| M = 0.7 | 18a-g |
| M = 0.9 | 19a-g |
| M = 1.2 | 20a-g |
| M = 1.5 | 21a-g |
| M = 2.0 | 22a-g |
| 4. Configuration: (E29T9C2) | |
| M = 0.7 | 23a-g |
| M = 0.9 | 24a-g |
| M = 1.2 | 25a-g |
| M = 1.5 | 26a-g |
| M = 2.0 | 27a-g |

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| B. Launch Escape System Characteristics - cont. CD, CL, C _m c.g., CA, CN, C _m A, X _{cp/D} vs α | |
| 5. Configuration: (E32T9C2) | |
| M = 0.7 | 28a-g |
| M = 0.9 | 29a-g |
| M = 1.2 | 30a-g |
| M = 1.5 | 31a-g |
| M = 2.0 | 32a-g |
| C. Schlieren Photographs Launch Escape System Configurations | |
| 1. M = 2.0 | |
| E25T9C2 | 33 |
| E29T9C2 | 34 |
| E32T9C2 | 35 |
| 2. M = 3.5 | |
| E23T9C2 | 36 |

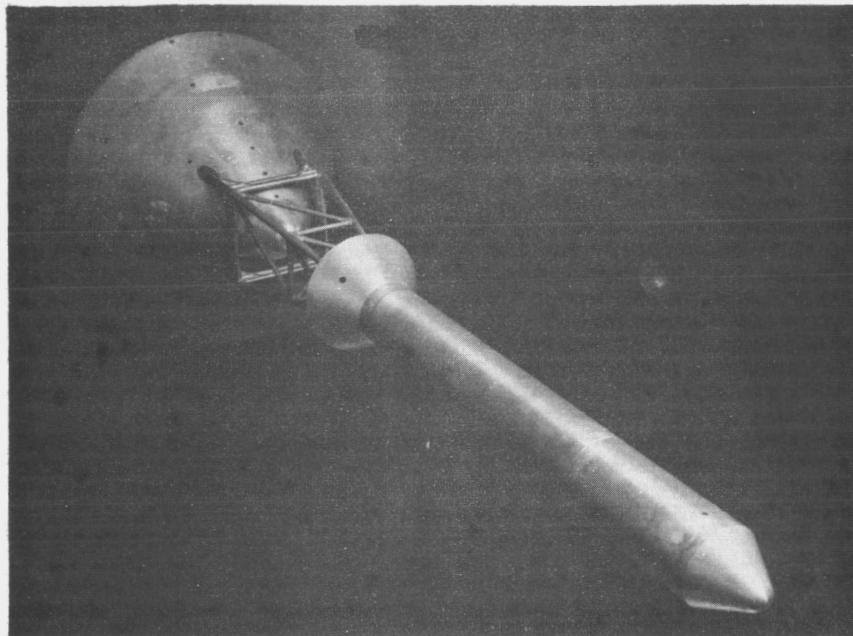
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Fig. 1

3/4 FRONT VIEW SHOWING LAUNCH ESCAPE SYSTEM
(E12 T9 C2)

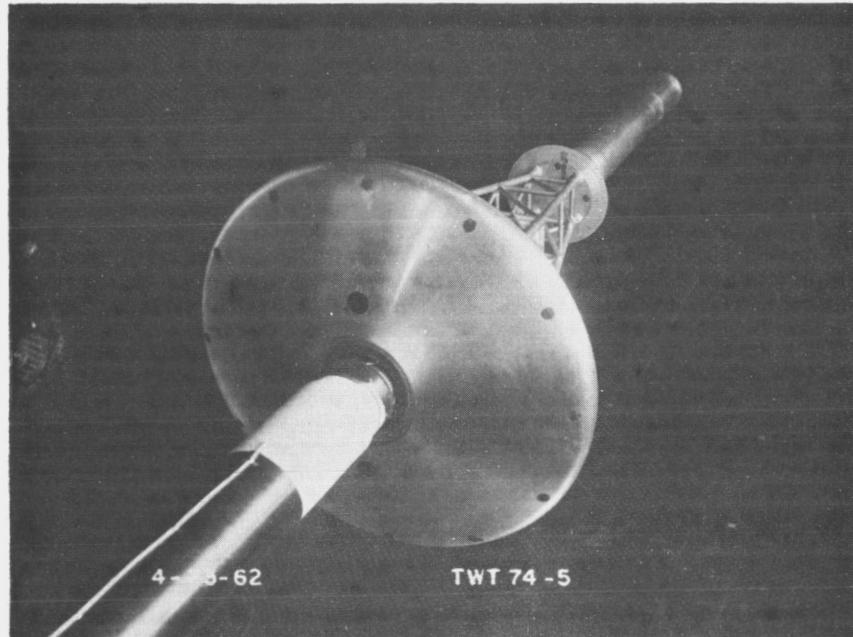


Fig. 2

3/4 REAR VIEW SHOWING LAUNCH ESCAPE SYSTEM
(E12 T9 C2)

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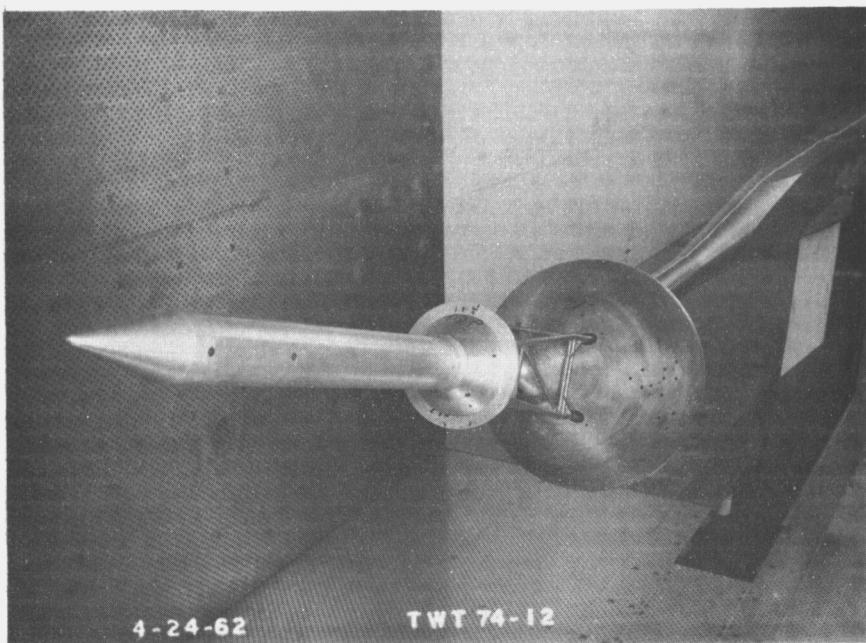
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Fig. 3

3/4 FRONT VIEW SHOWING LAUNCH ESCAPE SYSTEM
(E23 T9 C2)

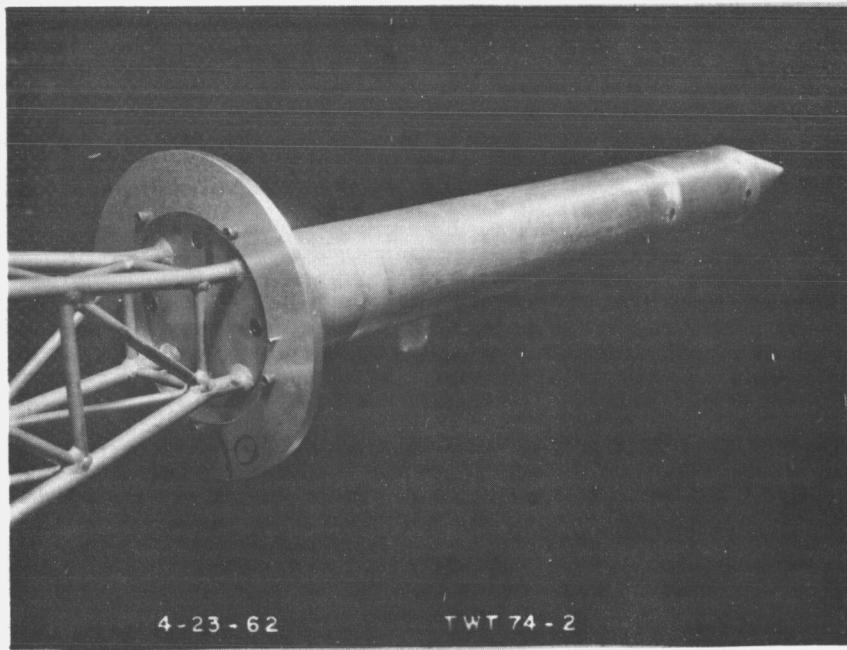


Fig. 4

CLOSEUP OF THE 65.0 INCH CIRCULAR DISC, AFT VIEW
(E23 T9 C2)

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Fig. 5

4-24-62 TWT 74-13

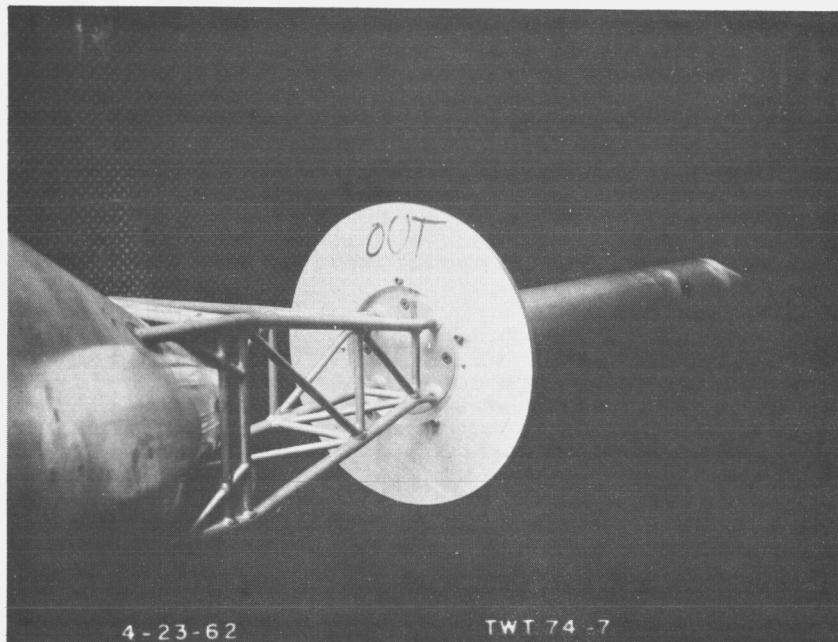
3/4 FRONT VIEW SHOWING LAUNCH ESCAPE SYSTEM
(E25 T9 C2)

Fig. 6

4-23-62 TWT 74-7

CLOSEUP OF THE 91.0 INCH CIRCULAR DISC, AFT VIEW
(E25 T9 C2)~~CONFIDENTIAL~~

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APPENDIX B

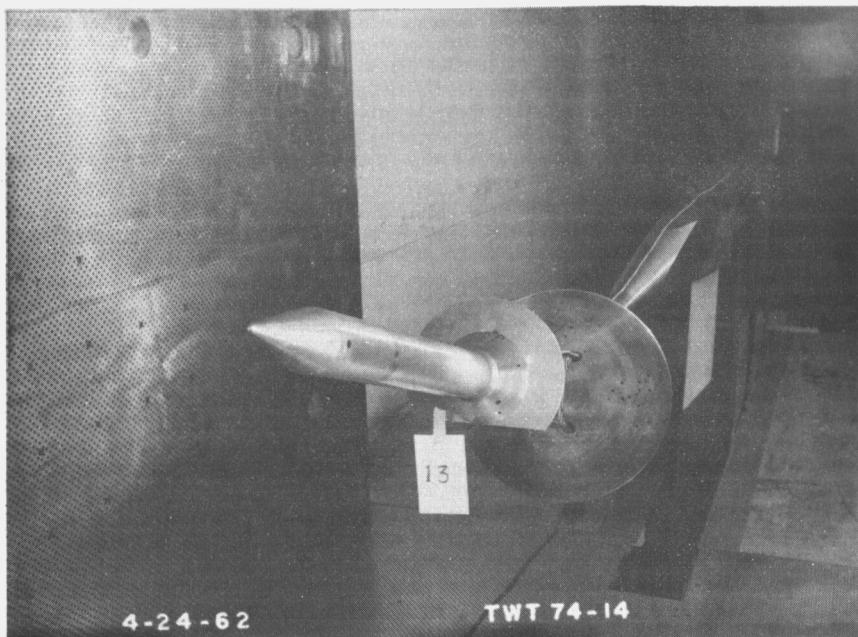
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Fig. 7

3/4 FRONT VIEW SHOWING LAUNCH ESCAPE
SYSTEM
(E29 T9 C2)

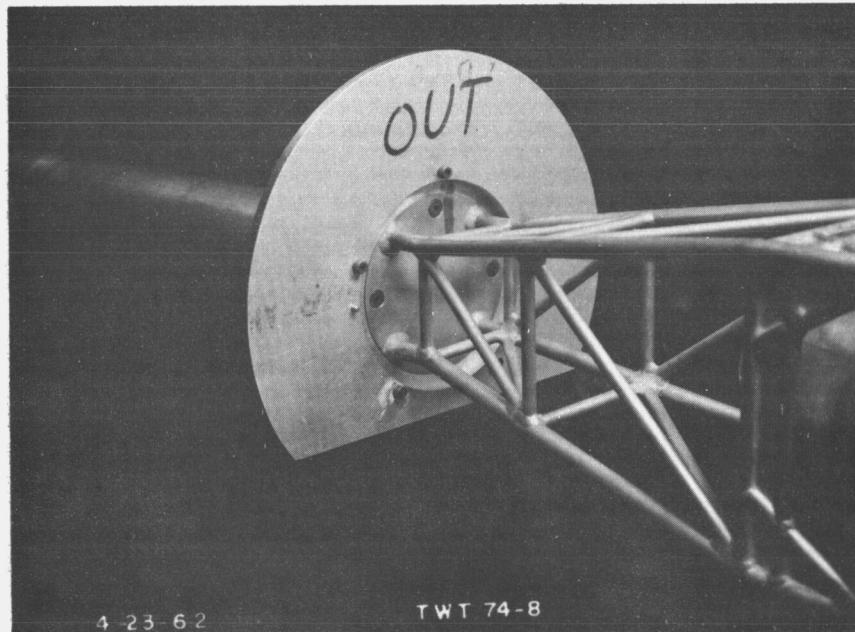


Fig. 8

CLOSEUP OF THE CLIPPED DISC, AFT VIEW
(E29 T9 C2)

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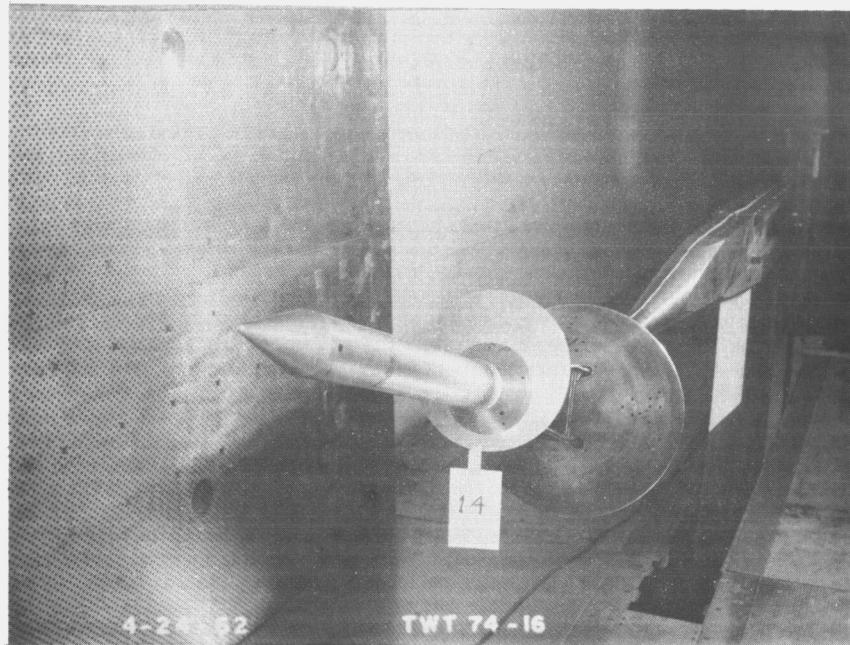
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Fig. 9

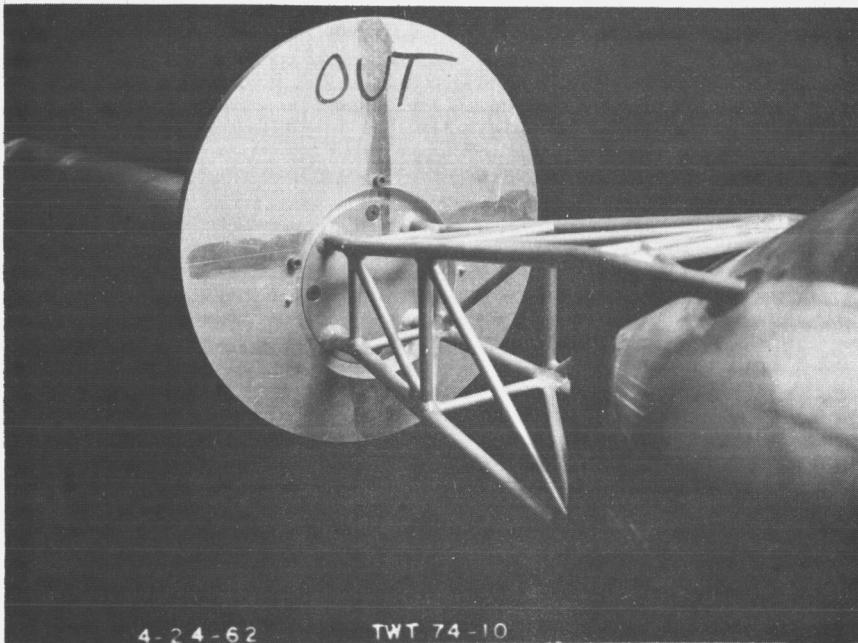


Fig. 10

CLOSEUP OF THE ECCENTRIC CIRCULAR DISC,
AFT VIEW
(E32 T9 C2)

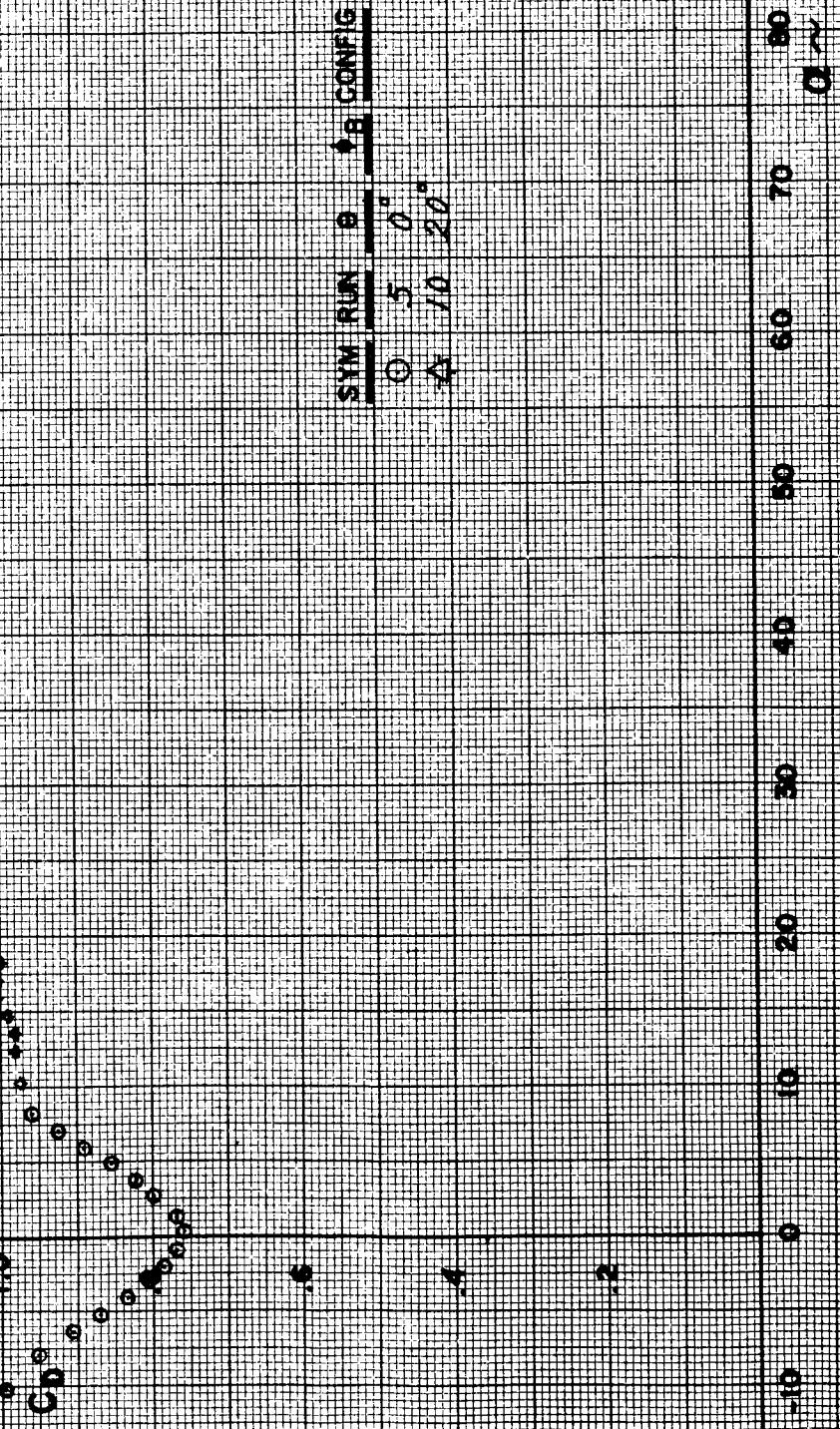
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_D = 0

$\epsilon_1 T_1 C_2 / 120^{\circ}$ TOWER
 $\epsilon_2 R_N = 1/5.3$



| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 C_L vs α

$E_{1/2} T_2 C_2 = 1.53$
 $M_\infty = 1.106$
 $R_N = 14.1$

120° TOWER

CONING

 C_L

CONING

2

CONING

4

CONING

0 10 20 30 40 50 60 70 80 90 100

CONING

SIM RUN

θ

β

CONING

θ

β

CONING

θ

β

CONING

FIG 11a

CL vs α

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 C_{nq} vs α

E,21-C2 120° TOWER

RN-2/4/1 NO. 6

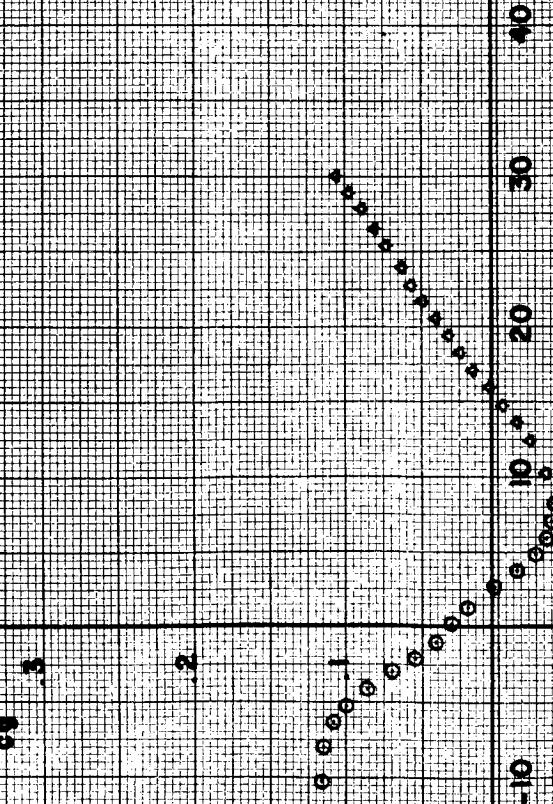
 $M_0 = 1.33$ $\frac{g}{g} = -3/5.5$ $\frac{g}{g} = +0.24$ C_{nq} 

FIG 1/6
 C_{nq} vs α
 LAUNCH ESCAPE SYSTEM CHARACTERISTICS
 E,21-C2 120° TOWER
 RN-2/4/1 NO. 6
 $M_0 = 1.33$
 $\frac{g}{g} = -3/5.5$
 $\frac{g}{g} = +0.24$

SYM RUN θ Δ CONFIG

0 5°
 1 0 20°

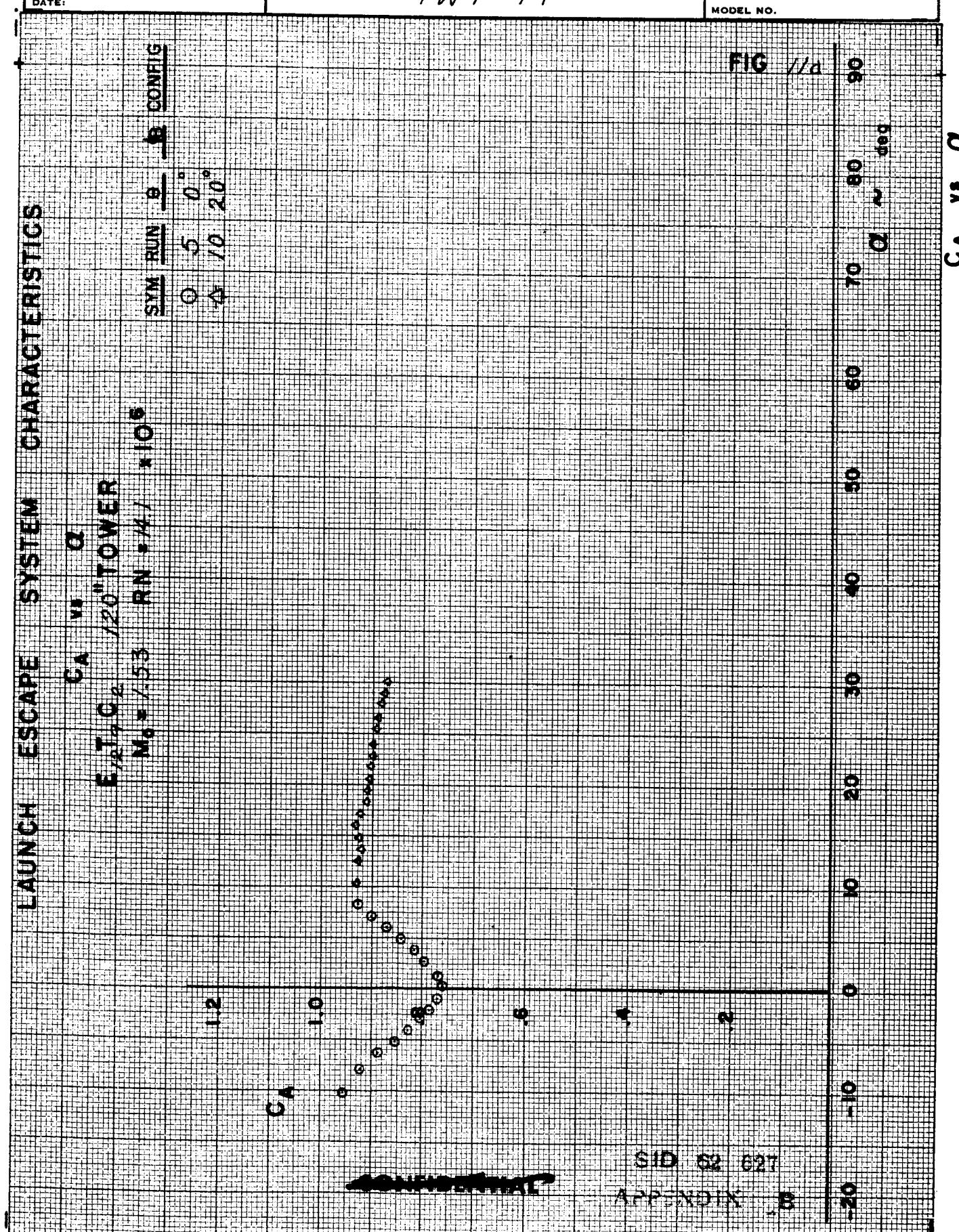
-1

-2

31 32 627

X-ELAN/EPIC

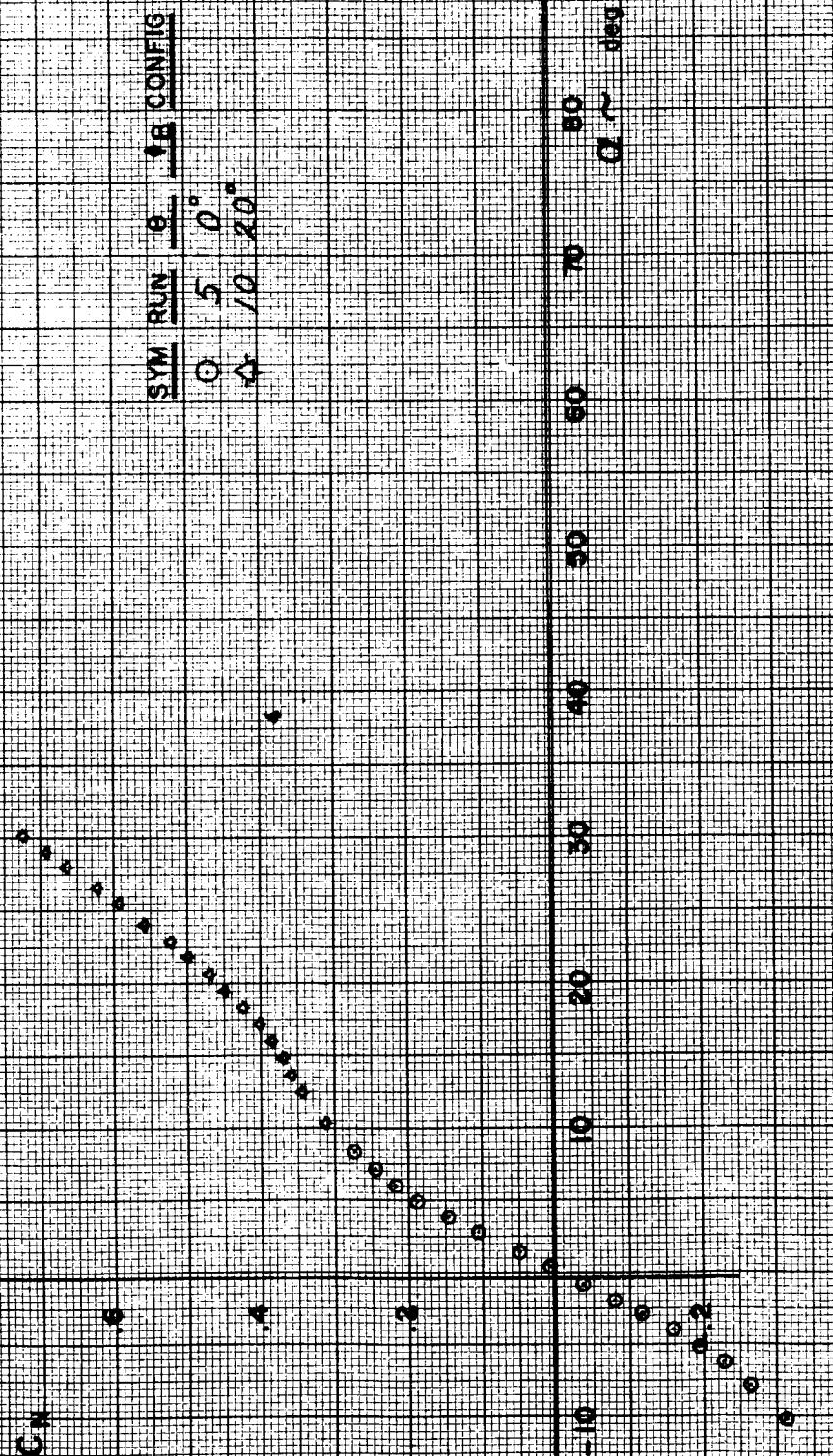
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_N vs C_R /20° TOWER
 $M_0 = 1.53$ $R_N = 141 \times 10^6$



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APPENDIX B

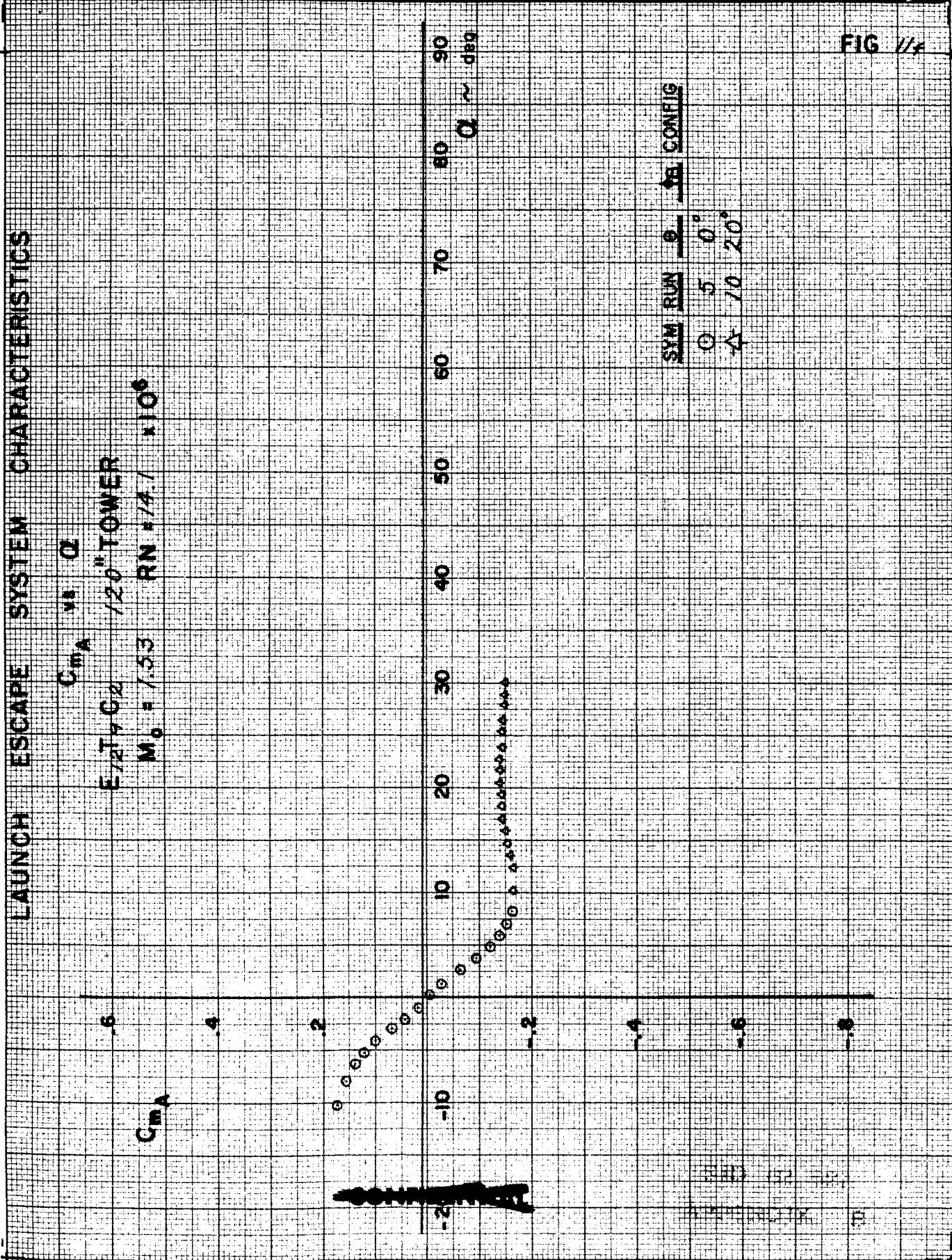
 C_N vs α

FIG 1/a

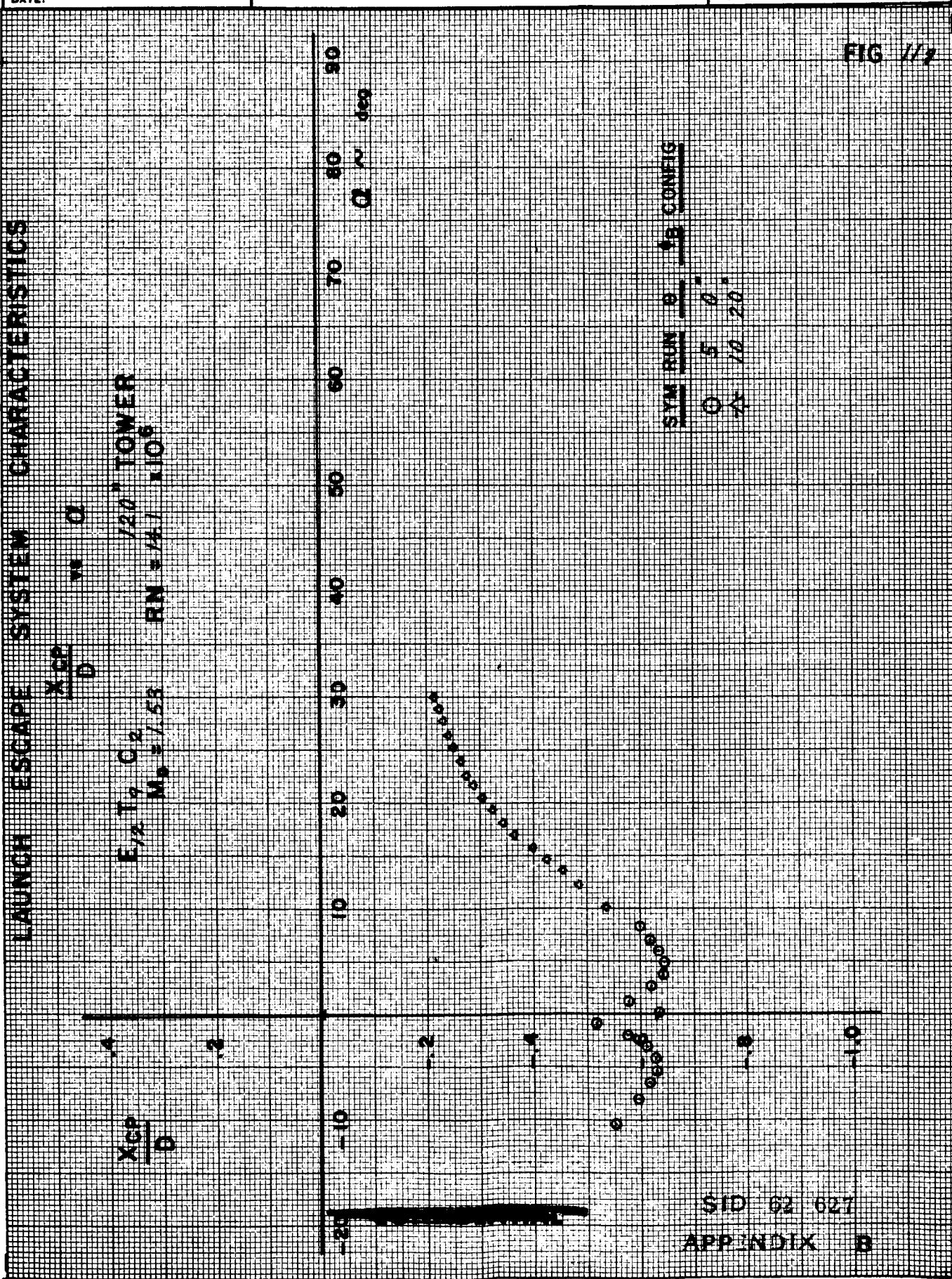
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{m_A} vs α
 EATC 2 120" TOWER
 $M_0 = 1.53$ $RN = 14.7 \times 10^6$



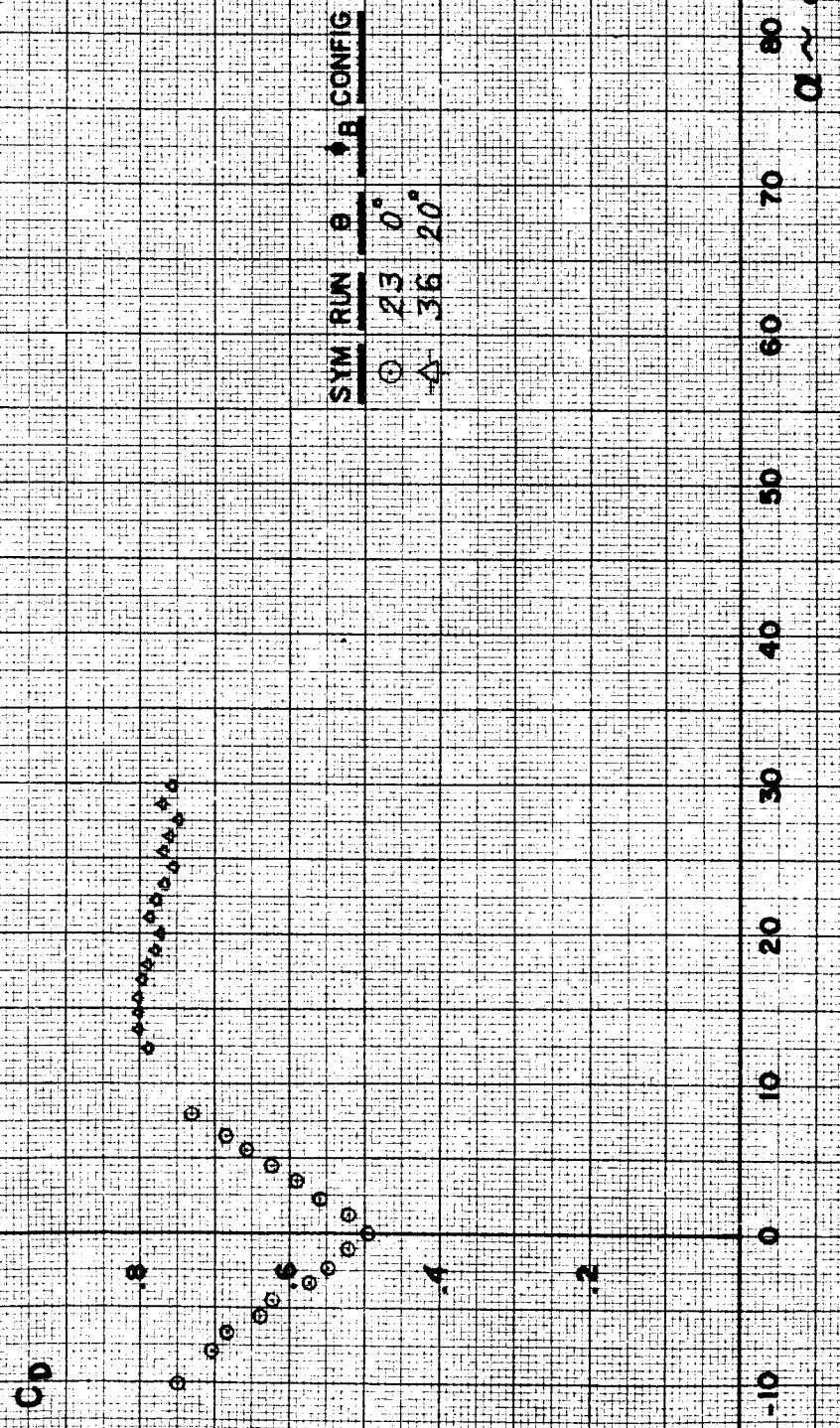
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$E_2 = T_p C_2$ $T_w = 1.20$ TOWER
 $M_a = 0.7$ $RNE = 1/34$ α_{06}

 $C_d \text{ vs } \alpha$

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E_{A1}, C_2
 $A_{\infty} = 0.7$
 22° TOWER
 8.8 ft. AGL
 100°

C_L
 α

C_L

A_{∞}

TOWER

8.8 ft.

100°

10 20 30 40 50 60 70 80 90 100

SIM RUN 6 • B CONFIG

23 0°
 36 20°

10 20 30 40 50 60 70 80 90 100

~~X~~ EXTENDED B

FIG /2 b

C_L vs α

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FIG 12c

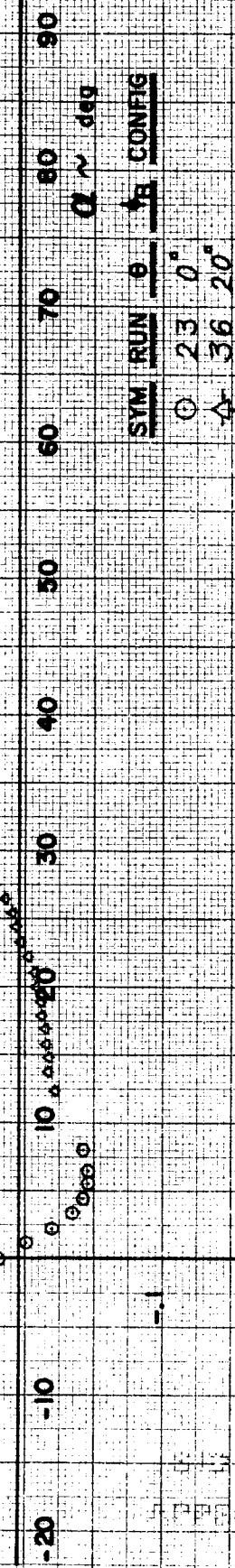
v m o g vs Q

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{nay} vs α
 $E_{237}, C_2 / 20^\circ - TOWER$
 $M_0 = 0.7$ $R_N = 1/3.4 \times 10^6$

$$\frac{E}{D} = -3755$$

$$\frac{E}{D} = +044$$

 C_{nay} 3
2
1
0
-1
-2

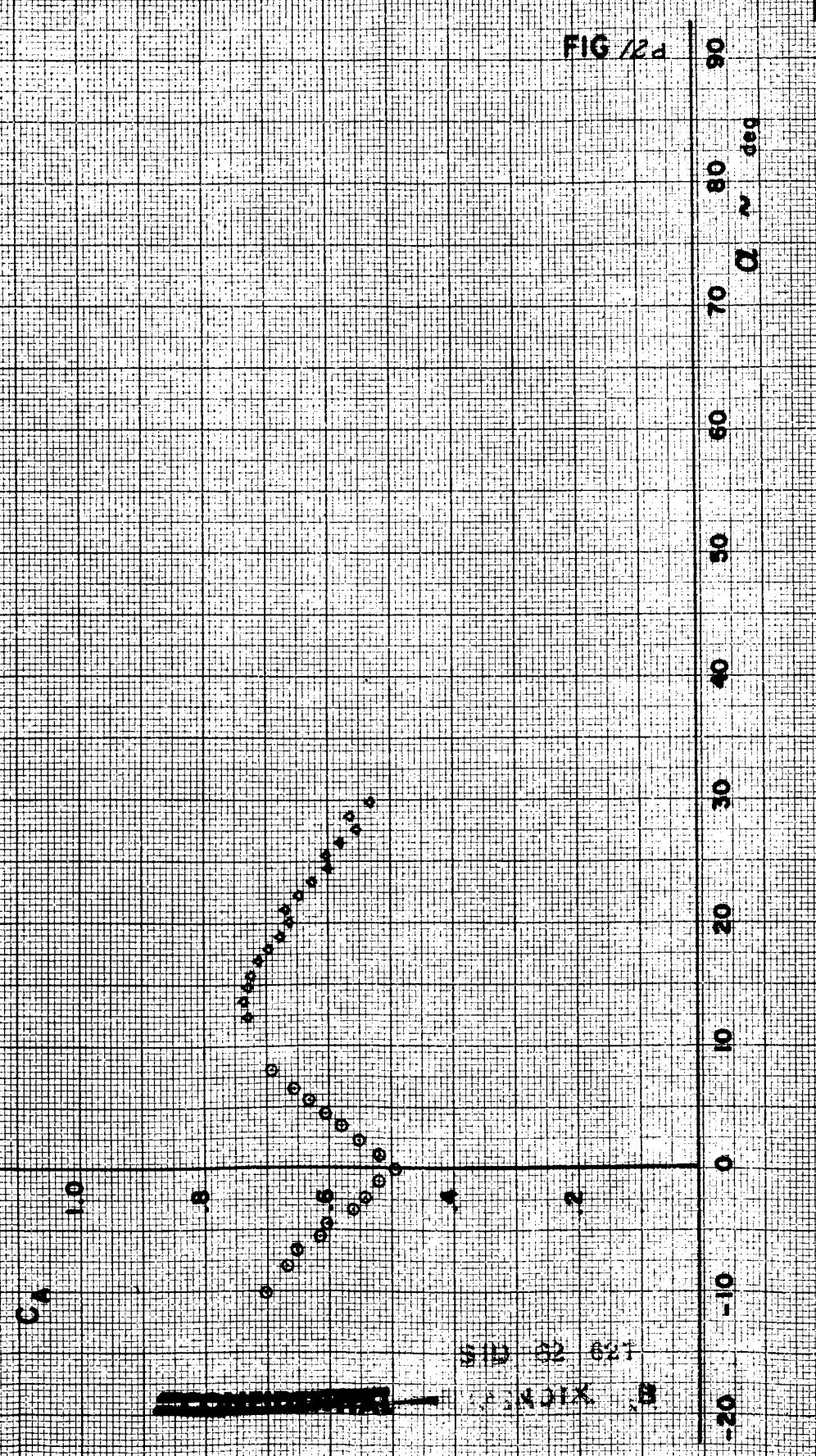
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LAUNCH SYSTEM CHARACTERISTICS

$E_{21} = C_2 / 20^{\circ}$ TOWER
 $R_N = 3.2 \times 10^6$
 $M_s = 0.7$

SIM RUN # 8 CONTS

O 23 0°
A 36 20°



| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_N vs α
 $E_{23T}^1, C_2 / 20'' TOWER$
 $M_0 = 0.7 \quad R_N = 3.4 \times 10^6$

1.2
1.0

 C_N SYM RUN α - B CONFIG

○ 23 0°
 ▲ 36 20°

-20 -10 0 10 20 30 40 50 60 70 80 90
 α deg

FIG 12e

 C_N vs α

| | | | |
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LAUNCH REENTRY SYSTEM CHARACTERISTICS

E-2379 C2 /20" TOWER
M. = 0.7 RN = 13.4 *106

C.m.s.

E-2379 C2 /20" TOWER

M. = 0.7 RN = 13.4 *106

E-2379 C2 /20" TOWER

M. = 0.7 RN = 13.4 *106

C.m.s.

100 90 80 70 60 50 40 30 20 10 0 -10 -20

204

200

200

| SIM RUN | 0 | 20 |
|---------|----|----|
| 0 | 23 | 0 |
| 1 | 36 | 20 |

STD 52 627

X 11 1/2 X 11 1/2

FIG. 12A

Cma vs Q

| | | |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

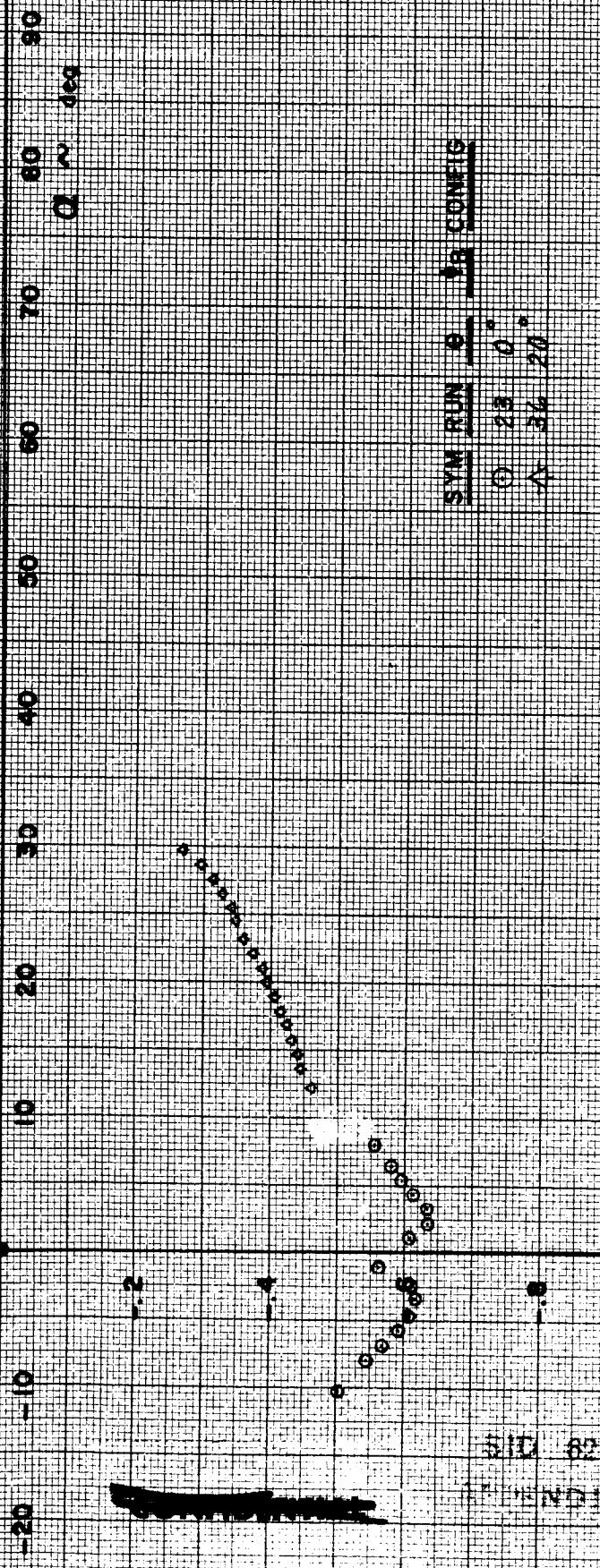
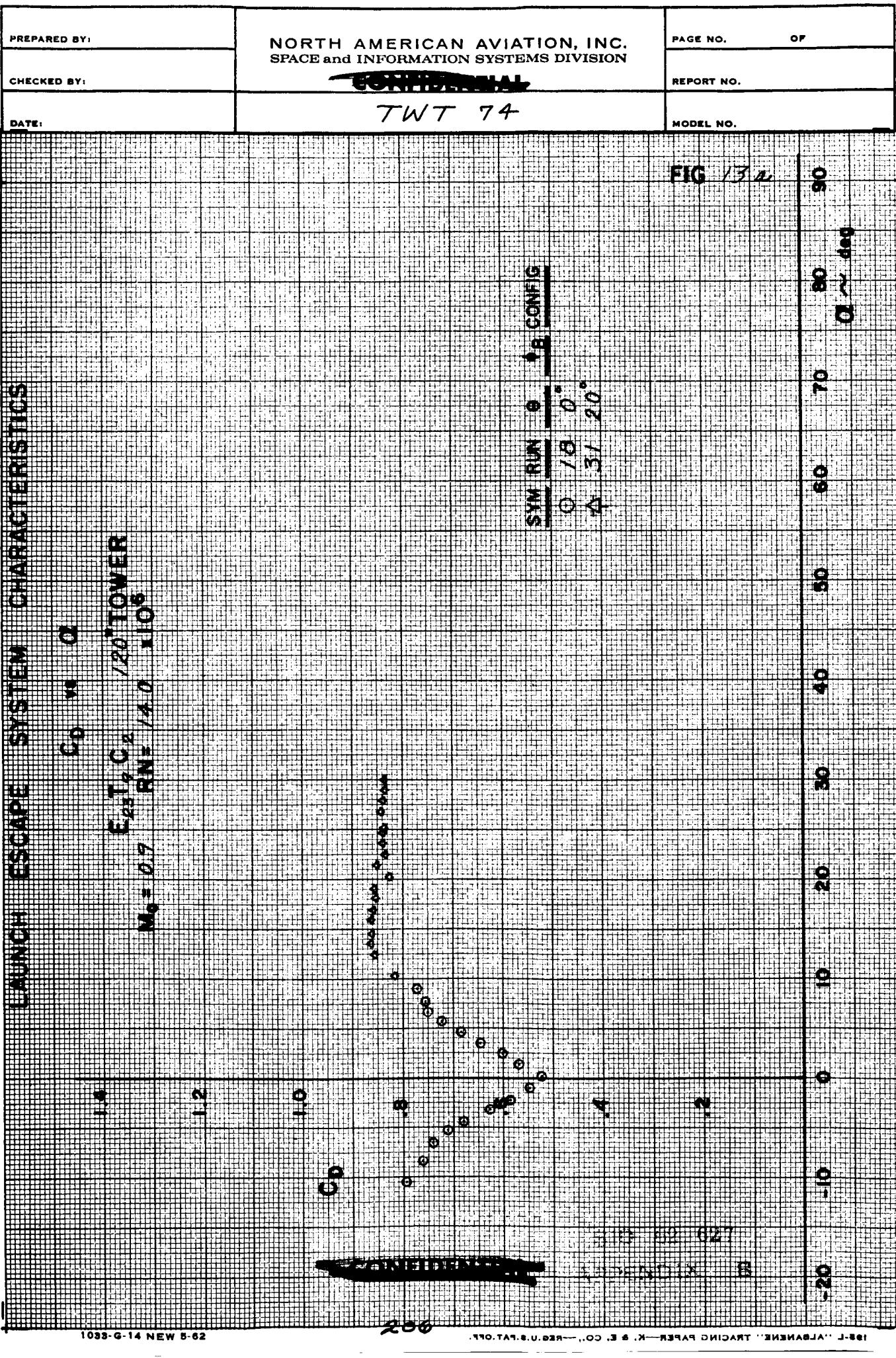
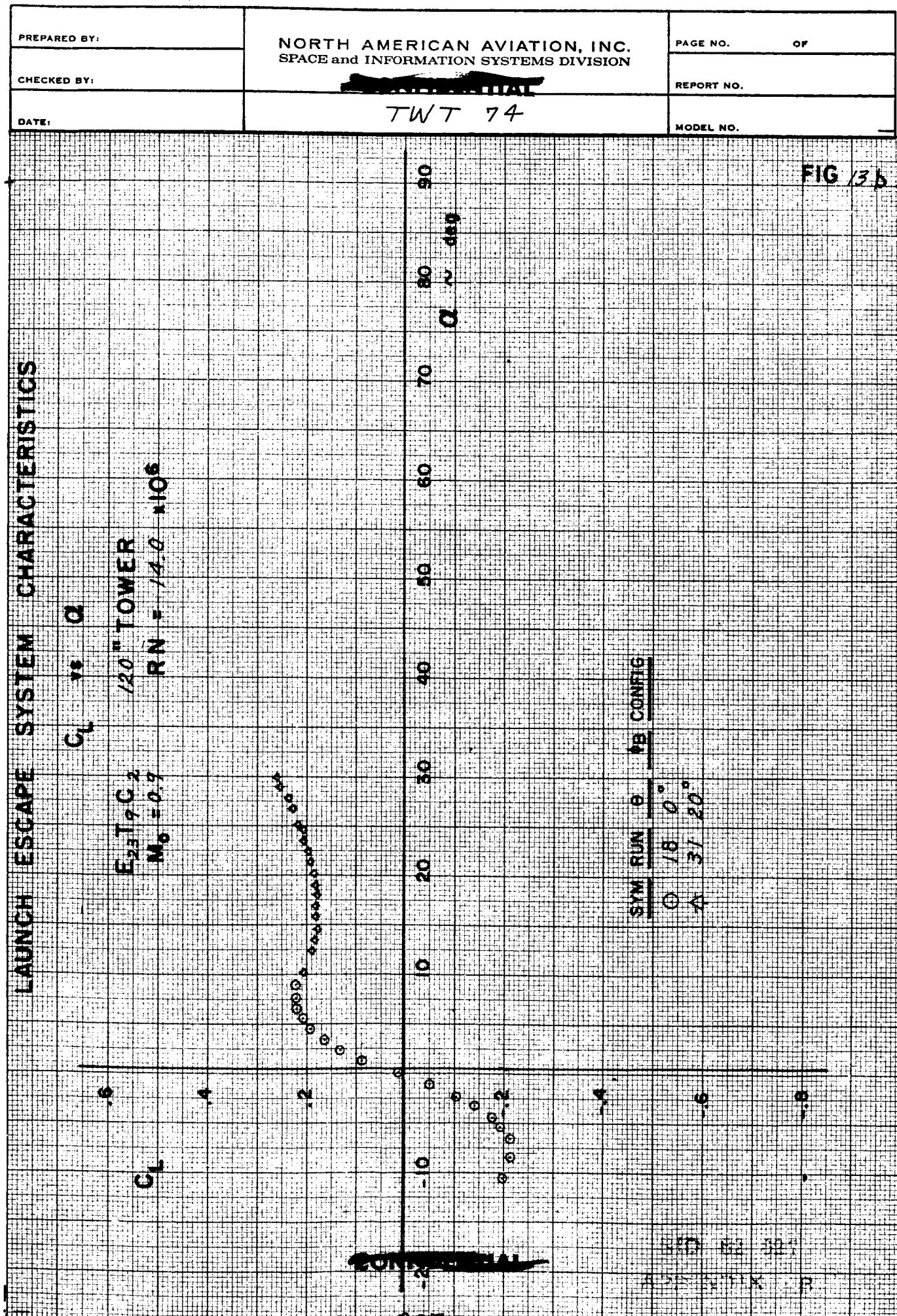
 $\frac{X_{CP}}{D}$ $G_2 = T_2 \cdot C_2 \cdot M_2 \cdot 0.7$ EN * 1/20" TOWER
EN * 1/32" FLOOR

FIG 12g

 $\frac{X_{CP}}{D} \text{ vs } \alpha$

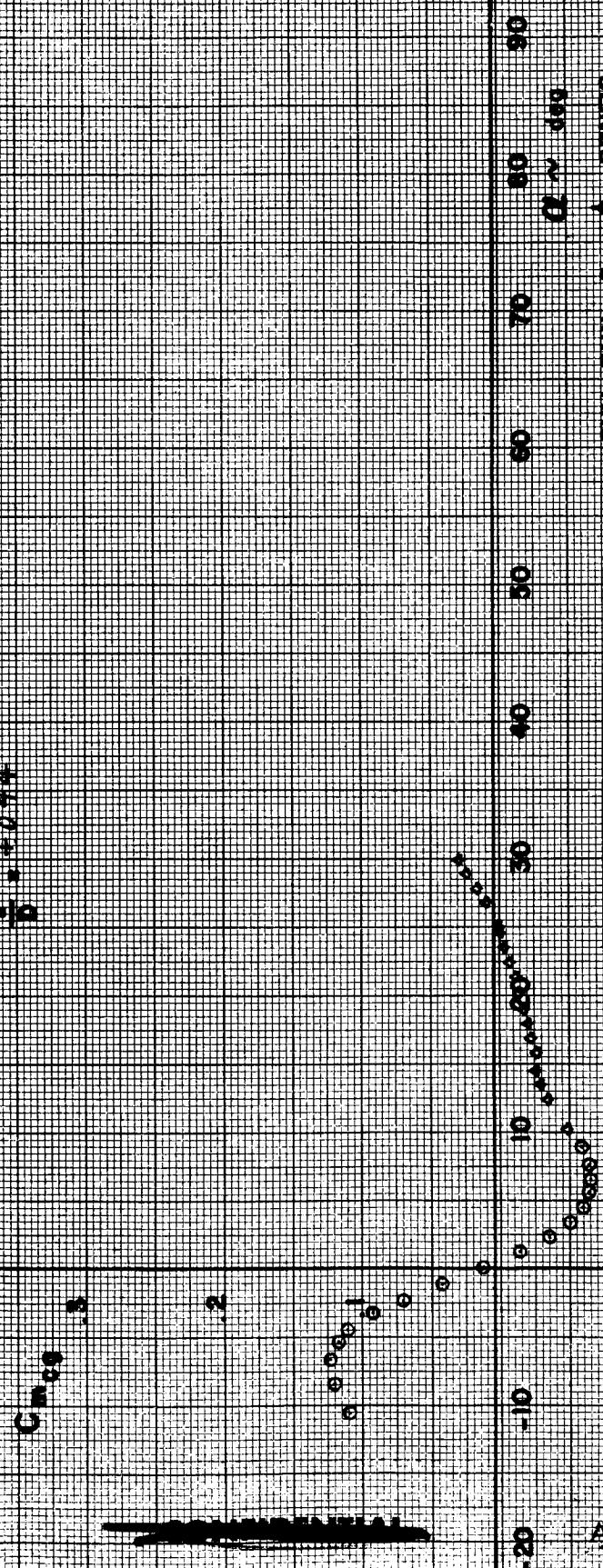


C_L vs α

| | | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$C_{n,g}$ vs Q
 $5.27 \cdot C_2$ 1/20 TOWER
 $W_0 = 0.3$ $R_{min} = 7.0$ KILO
 ± 0.05 ± 0.44

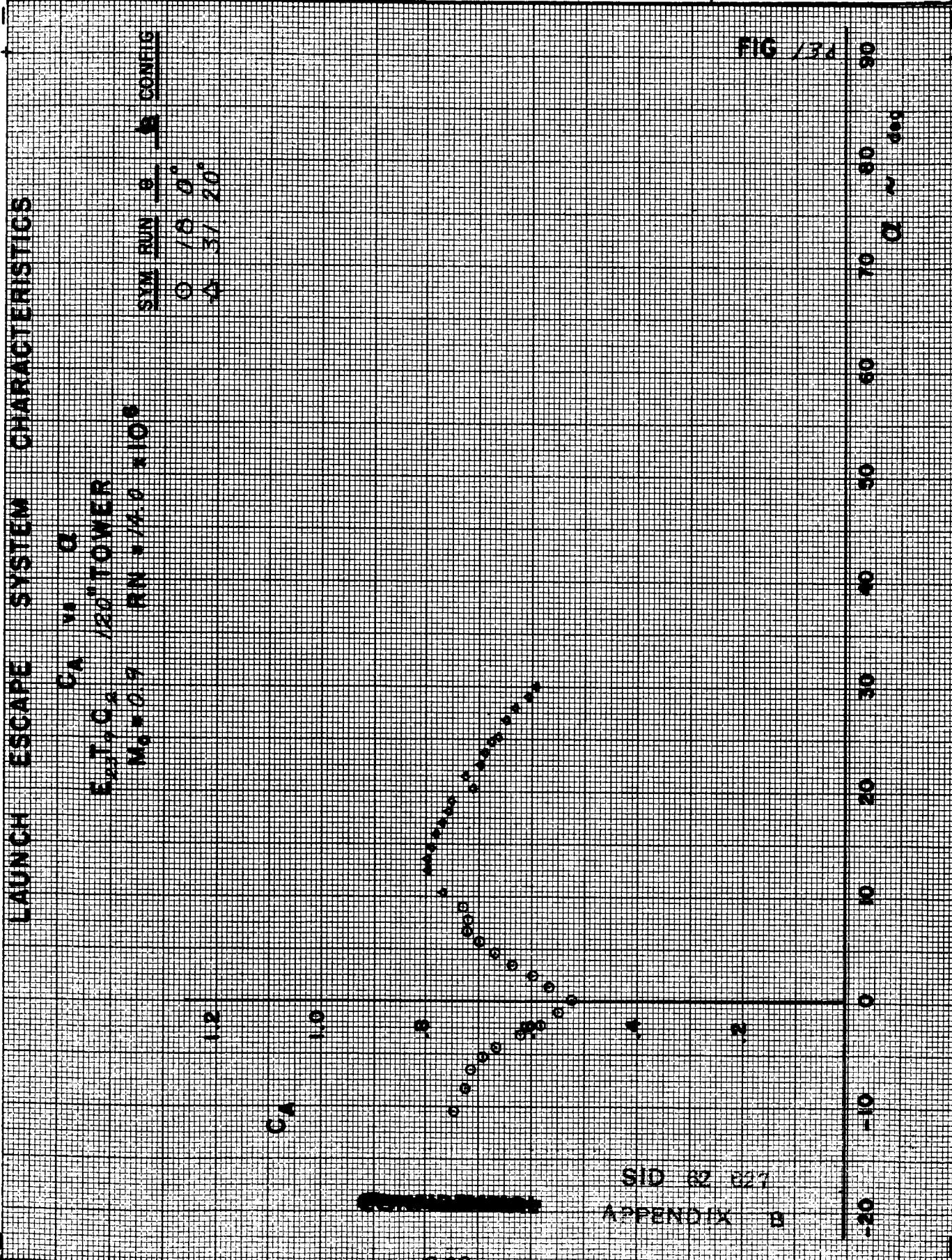


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FIG 17c

Cn,g vs Q

| | | |
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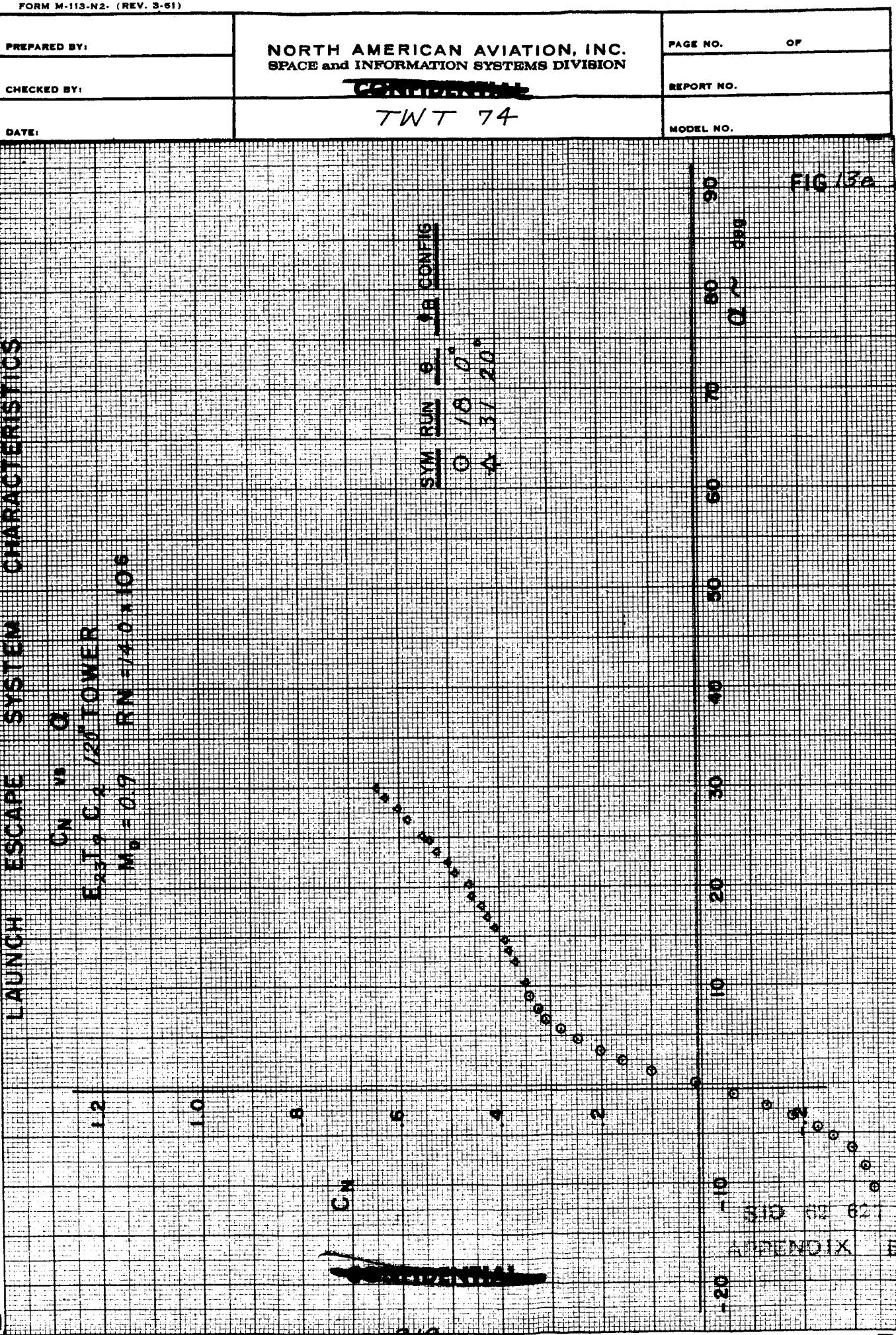
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LAUNCH SYSTEM CHARACTERISTICS

CN vs E_{23T}, C₂ /25° TOWER
 $M_0 = 0.9$ TN = 7400 NOS



CN vs Q

FIG 15a

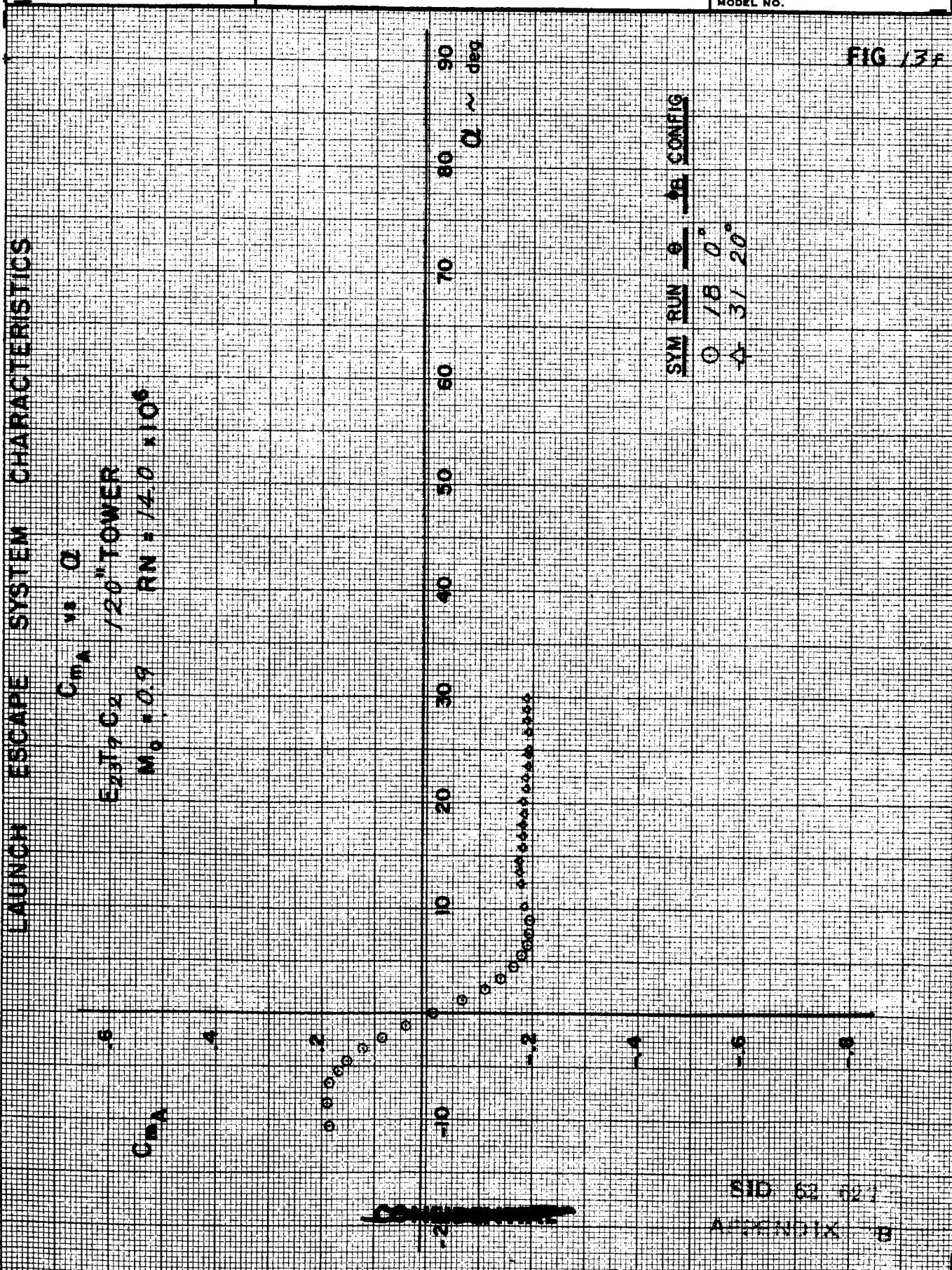
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{m_A} vs α
120° TOWER
 $RN = 1/20 \times 10^6$
 $M_0 = 0.9$



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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

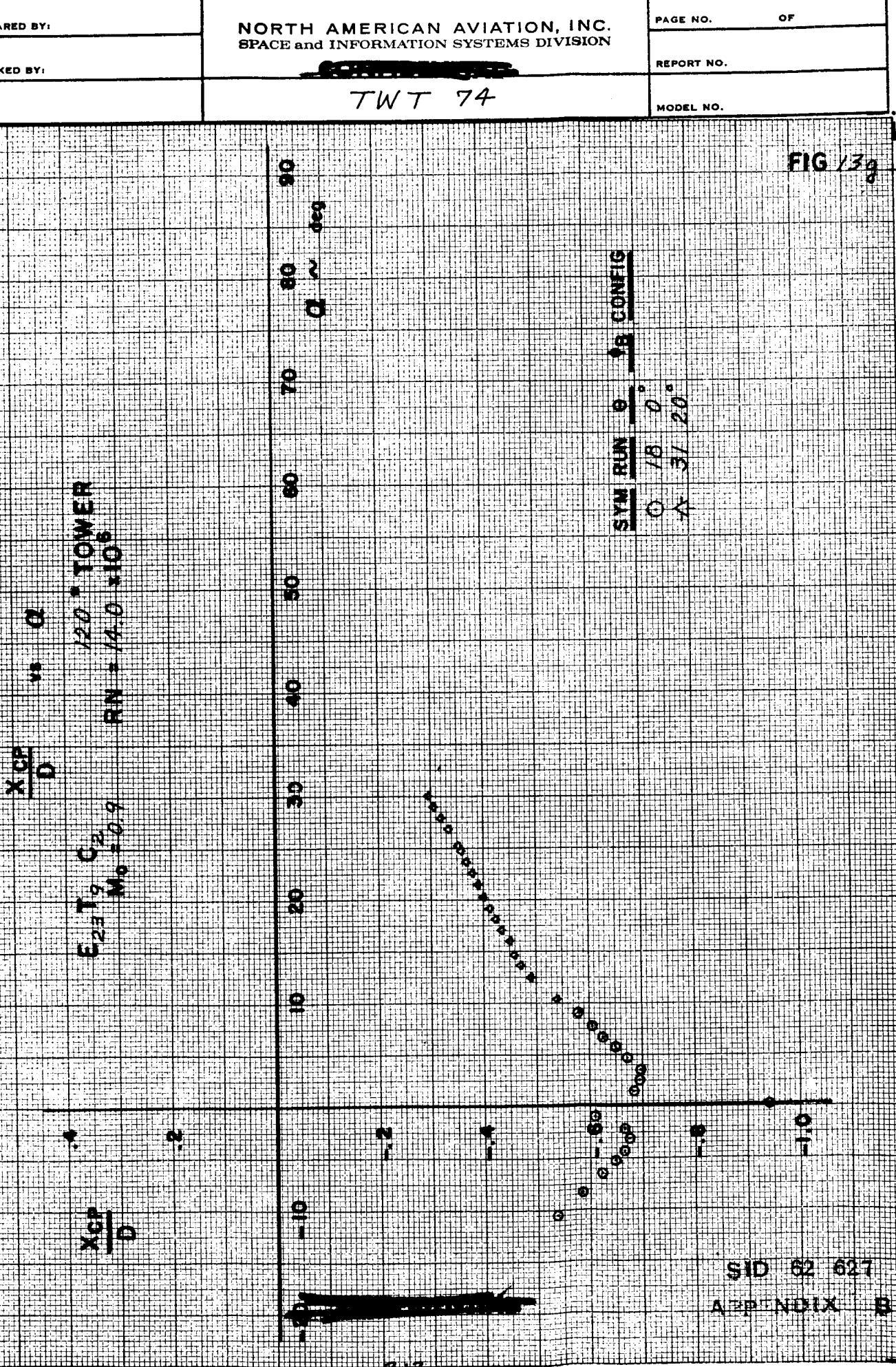
 $\frac{X CP}{D} \text{ vs } q$

FIG 13g

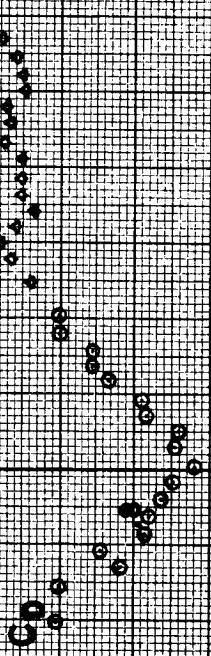
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$C_0 \propto \alpha$

$E_{23} T_1 G_2 / 120' TOWER$
 $M_0 = 1.2$ TRNE / 4.2 KIDS

1.2



SIM RUN # 1B CONFIG

○ 45 0°
△ 40 20°

FIG 12a

82
82
82

80
80
80

70
70
70

60
60
60

50
50
50

40
40
40

30
30
30

20
20
20

10
10
10

0
0
0

SID 62 627

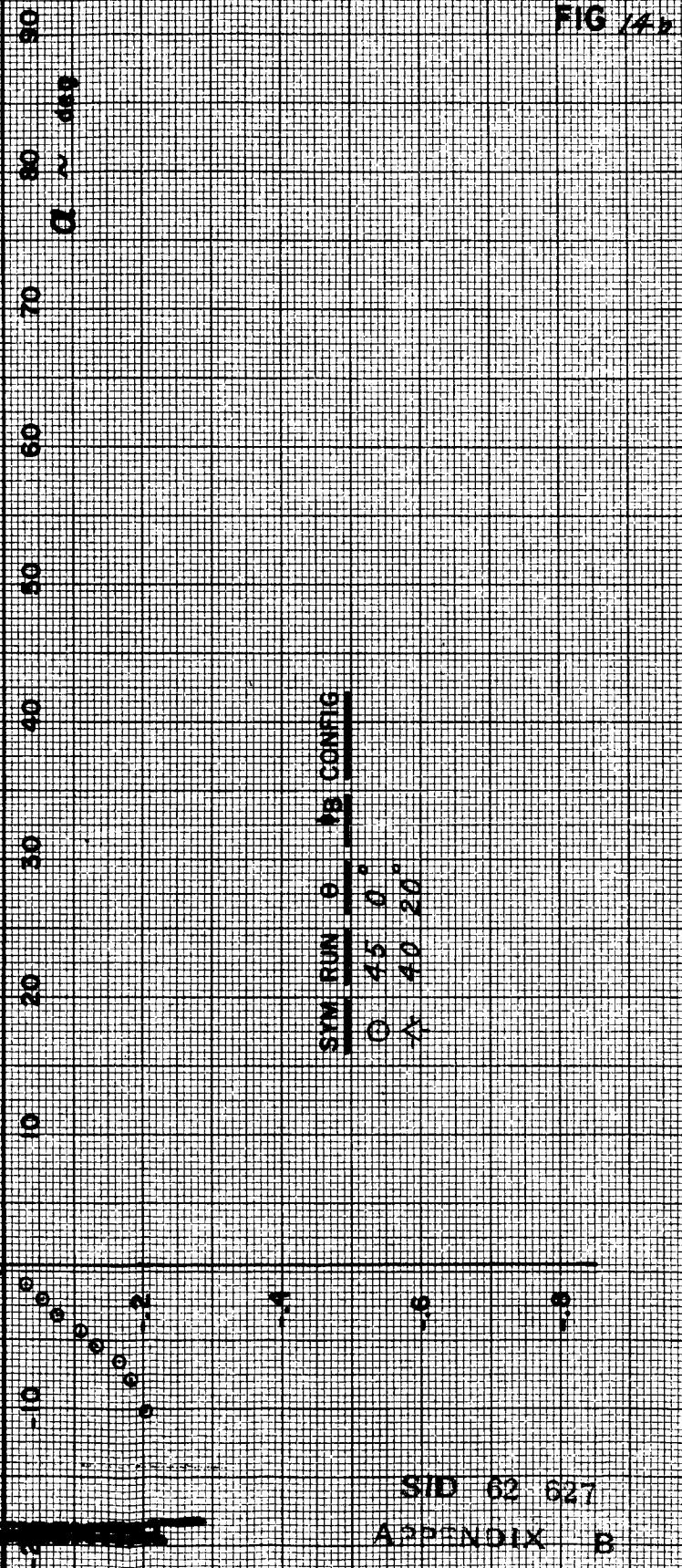
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$C_D \propto \alpha$

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_L vs α
 $E_{23}^3 C_2$ /20 TOWER
 $M_0 = 1/2$ $R_N = 1/2 \times 10^6$



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APPENDIX B

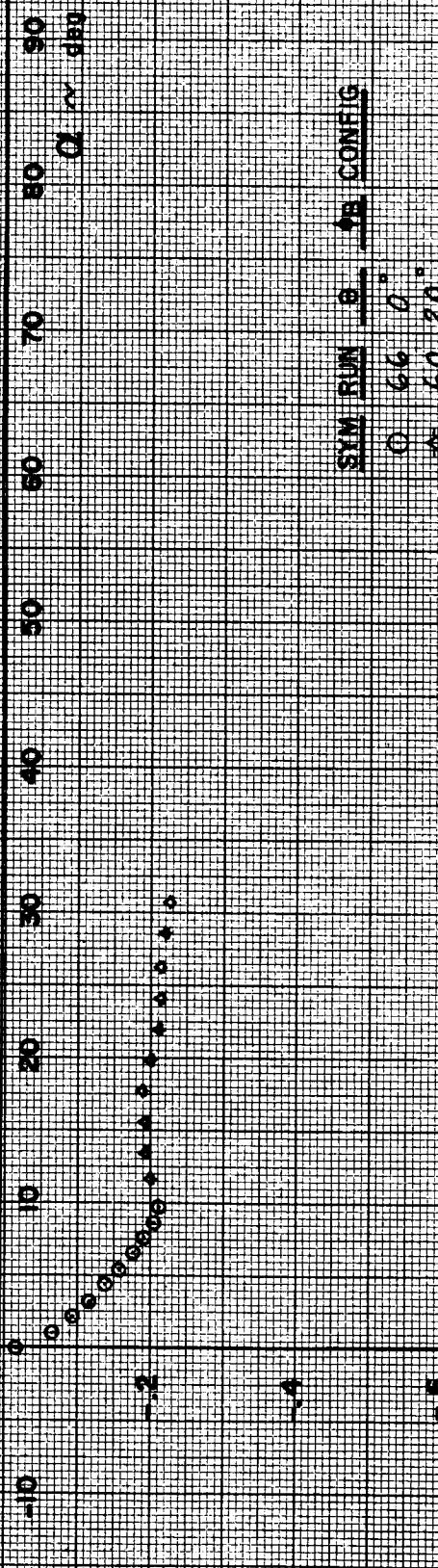
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FIG 22F

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 C_{mA} vs Q

E_2, T_2, C_2 726" TOWER
 $N_6 = 1/773$ $RN = 14.2 \times 10^6$

 C_{mA} 

S10 62 R27

B IXW MEX A

 C_{mA} vs Q

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FIG 14d

LAUNCH SYSTEM CHARACTERISTICS

EJECTION TOWER
RN 142 * OS
M6CA vs α CONFIG
 45° 0°
 40° 20°

CA

1.2

1.0

2

CA vs α
-20 -10 0 10 20 30 40 50 60 70 80 90 degSIN 62 627
INDEX B

| | | | |
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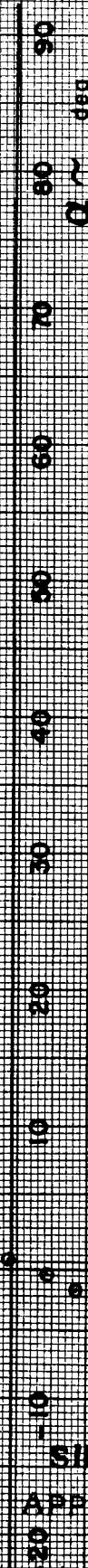
TWT 74

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$C_N \approx 0.4$
 $E_2 T_1 C_2 / 20^{\circ}$ TOWER
 $M_\infty = 1/2$ $R_N = 1/2 \times 10^6$

SYM RUN θ - 1B CONFIG

O 45 0°
 △ 40 20°



FIGURE

CN vs Q

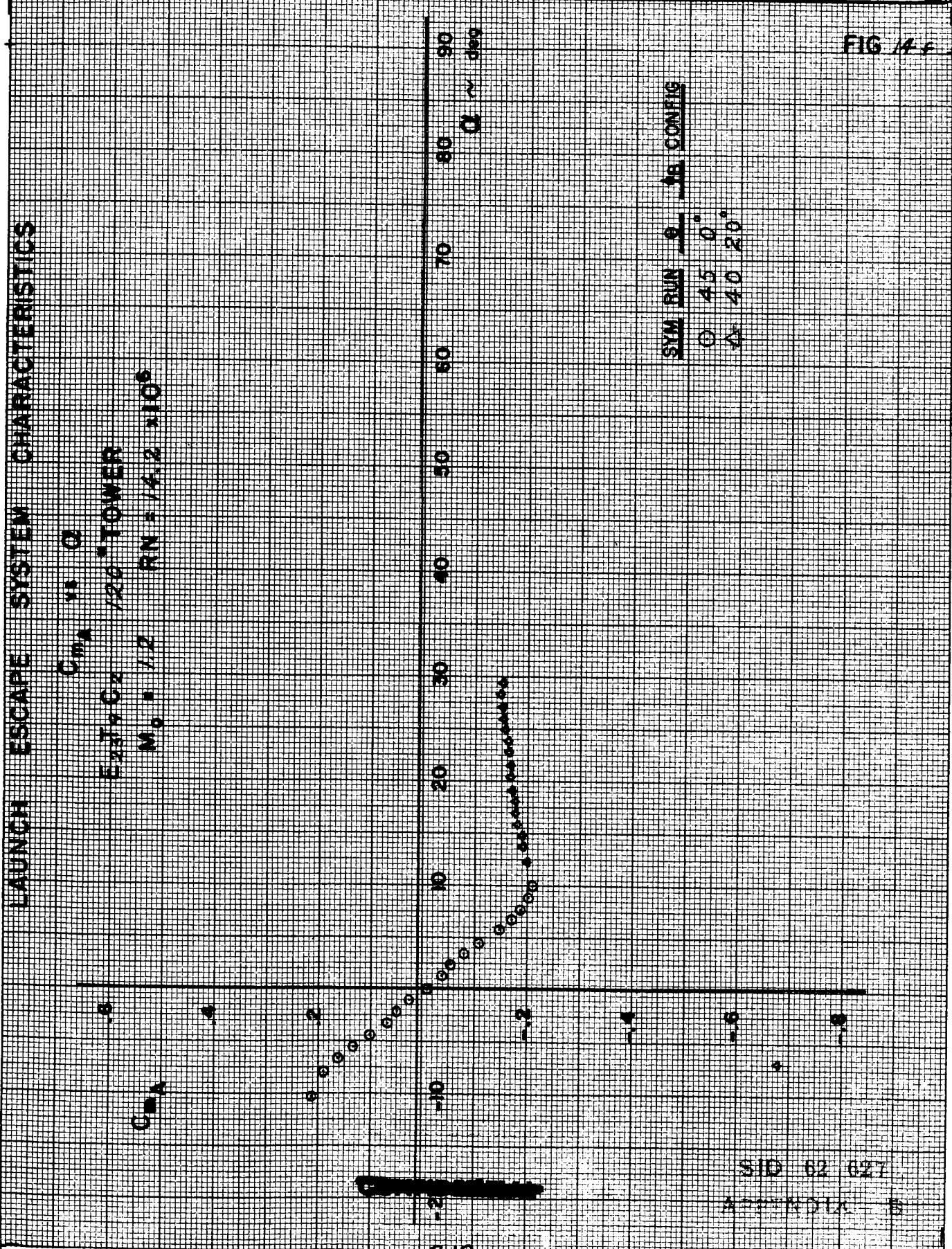
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APPENDIX 3
20

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

ELASCO G7 120 TOWER
 $M_\infty = 1/2$ RN = 1/4, 2 X 10⁵

C_{mA}

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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

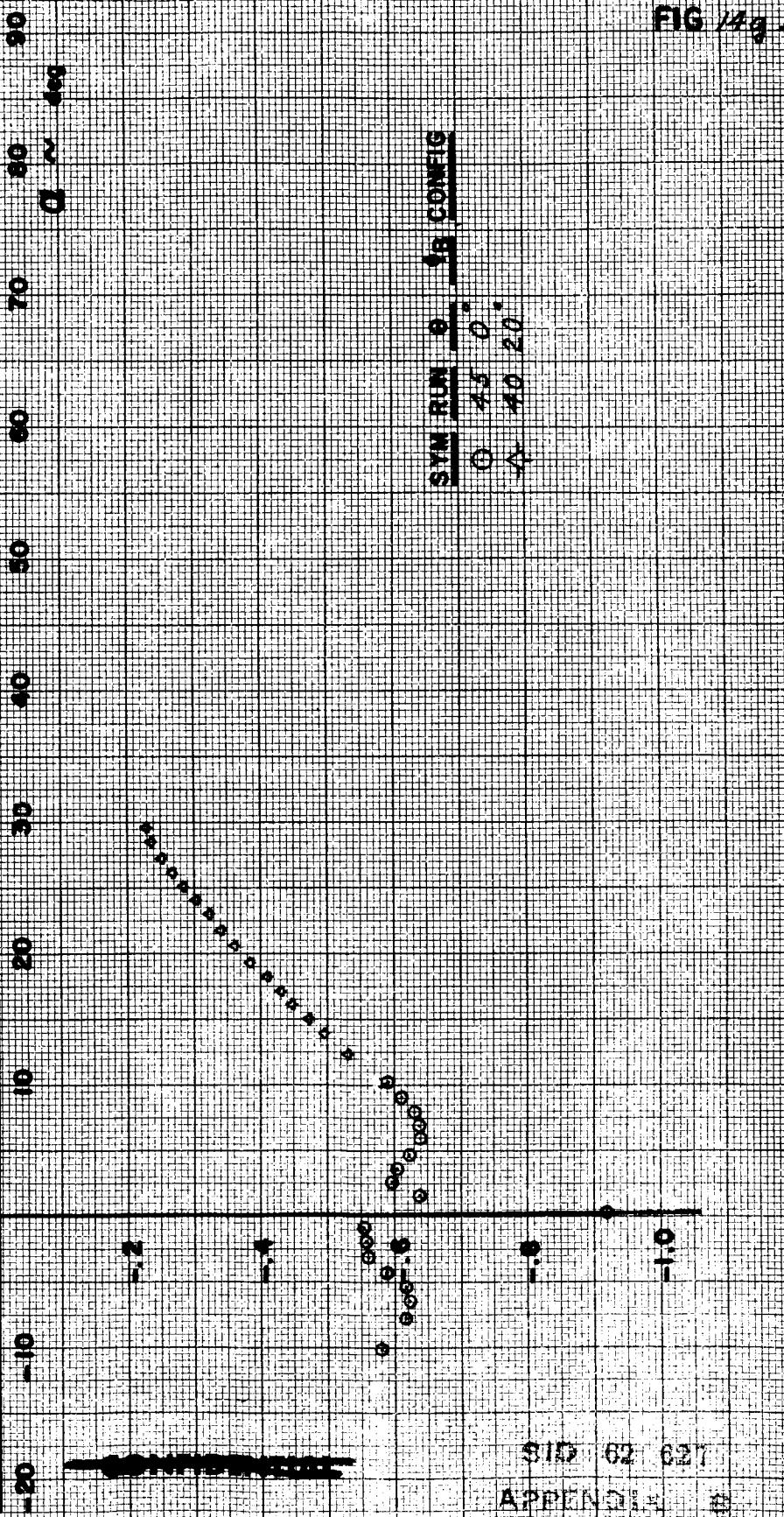
E₂₃ T₂ C₂ W₂ / 2. RIN = 14.2 x 10⁶ $\frac{X_{CP}}{D}$ 

FIG 14g

 $\frac{X_{CP}}{D} \text{ vs } D$

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

Co. w. Co.

E-2/T2C2 /20 TOWER
No. 3 /55 RNE /4.0 1.08

1.8

1.2

1.0

4

2

0

1.6

1.2

1.0

4

2

0

1.4

1.0

8

4

2

0

1.2

0.8

6

4

2

0

1.0

0.6

4

2

0

0

FIG 15a

a

C_D vs Q

STAB RIM 8° 0° 18° CONF

C 4 6 0 11 20

A

V

D

W

X

Y

Z

P

Q

R

S

T

U

V

W

X

Y

Z

P

Q

R

S

T

U

V

W

X

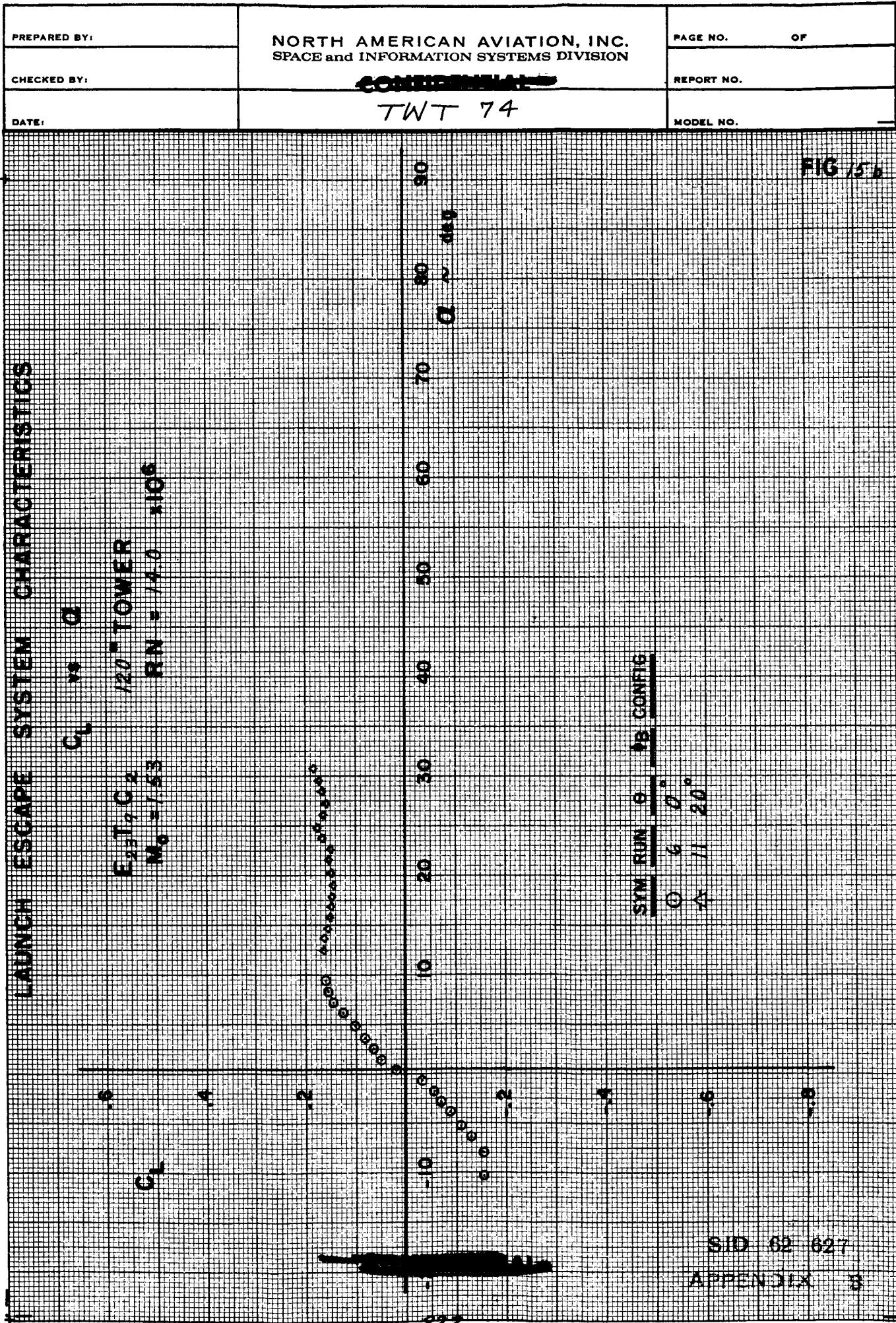
Y

Z

C_D = 6.2 527

X = 1.0 527

Z = 20



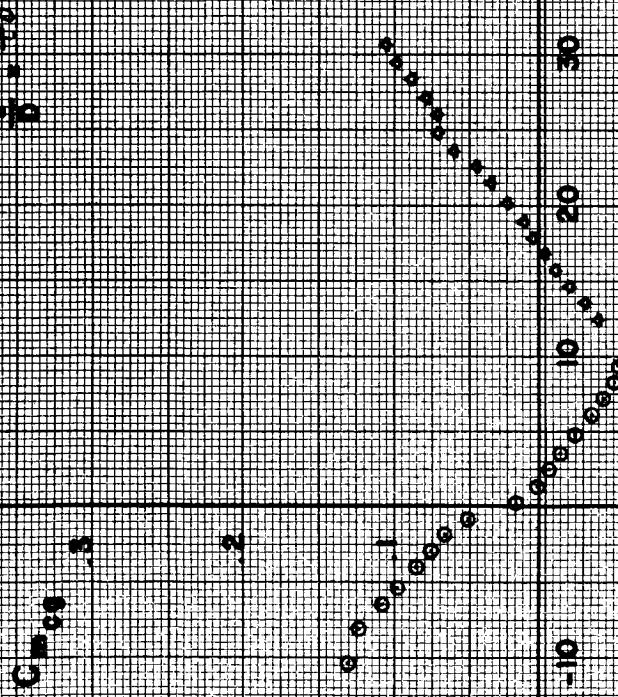
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

Cross vs Q

**E₂₃, C₂, 1/20° TOWER
M₀ = 1.53 R_N = 4.0 310°**

10 -33.55
-33.44
-33.33
-33.22
-33.11
-33.00



STW RUNS
0 6 0
0 11 20

CONF
0 4

FIG 152

SID 62 627

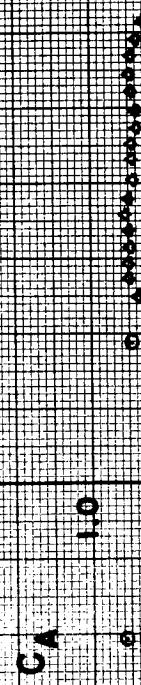
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LAUNCH SYSTEM CHARACTERISTICS

CA VI C
20" TOWER
RN 140 * 108
M₀ / 63

CA VI C₂
20" TOWER
RN 140 * 108
M₀ / 63



224

FIG 154

SID 62 627
APPENDIX B

90
80
70
60
50
40
30
20
10
0
-10
-20

CA vs C

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$C_N = \frac{C_1 + C_2}{2}$ TOWER
 $M_0 = 1.53$ R.N. = 144×10^6

1.2

1.0

 C_N

SYM RUN 9 0 °

4 11 20 °

90
80
70
60
50
40
30
20
10
0
-10
-20

FIG 15-5

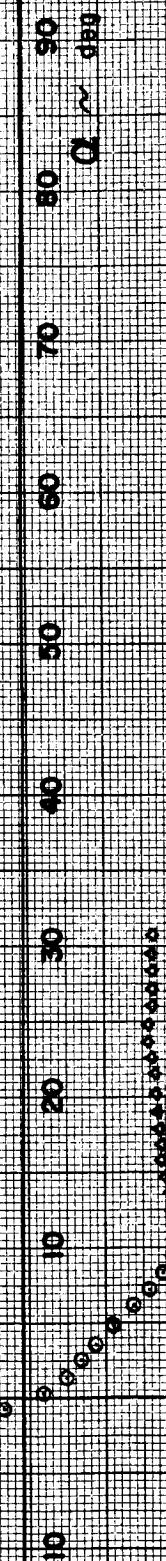
CN vs Q

| | | |
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SYSTEM CHARACTERISTICS

LAUNCH ESCAPE SYSTEM
 $C_{nA} \approx Q$
 $E_25T_2C_2 / 20^{\circ}$ TOWER
 $M_0 = 1/53$ RN = $1/4.0 \times 10^6$

6

 C_{nA} 

SIM RUN 8 B CONFIG
 0 6 11 20
 4

FIG 15F

Cma vs Q

SID 62 627

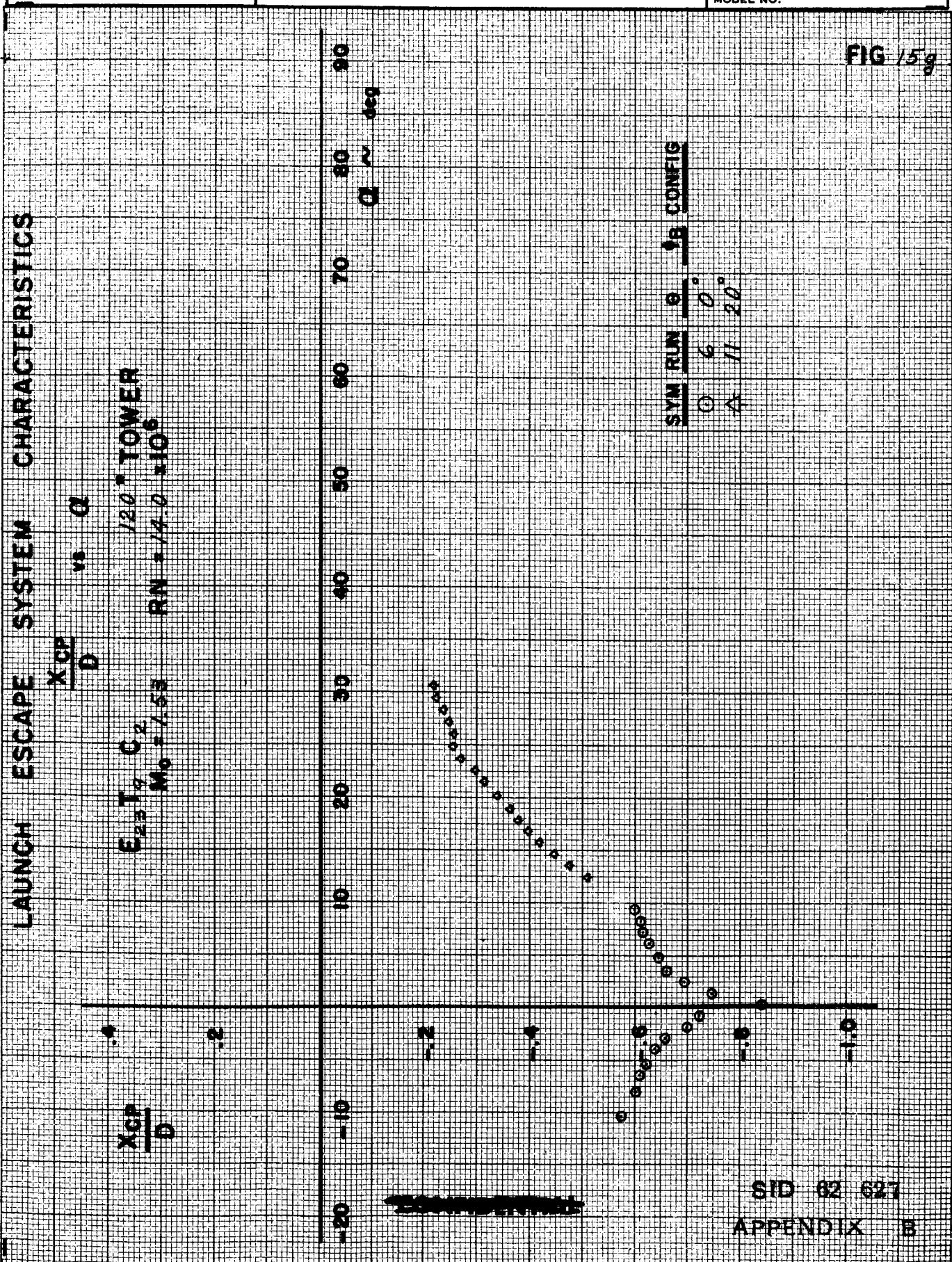
B X (N/A)

| |
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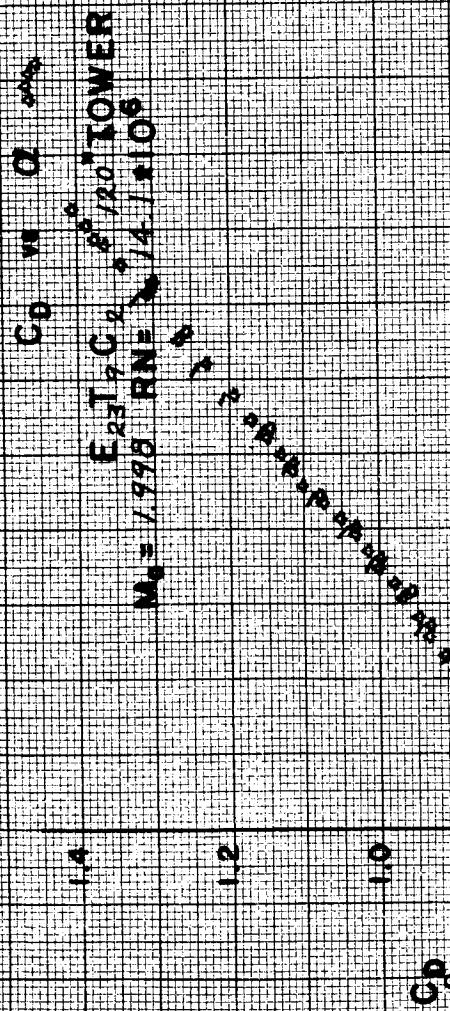

 X_Cp
 D
 α

| | | |
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FIG 16a

C_D vs α

LAUNCH ESCAPE SYSTEM CHARACTERISTICS



SIM RUN # 49 OF 62 CONFIG

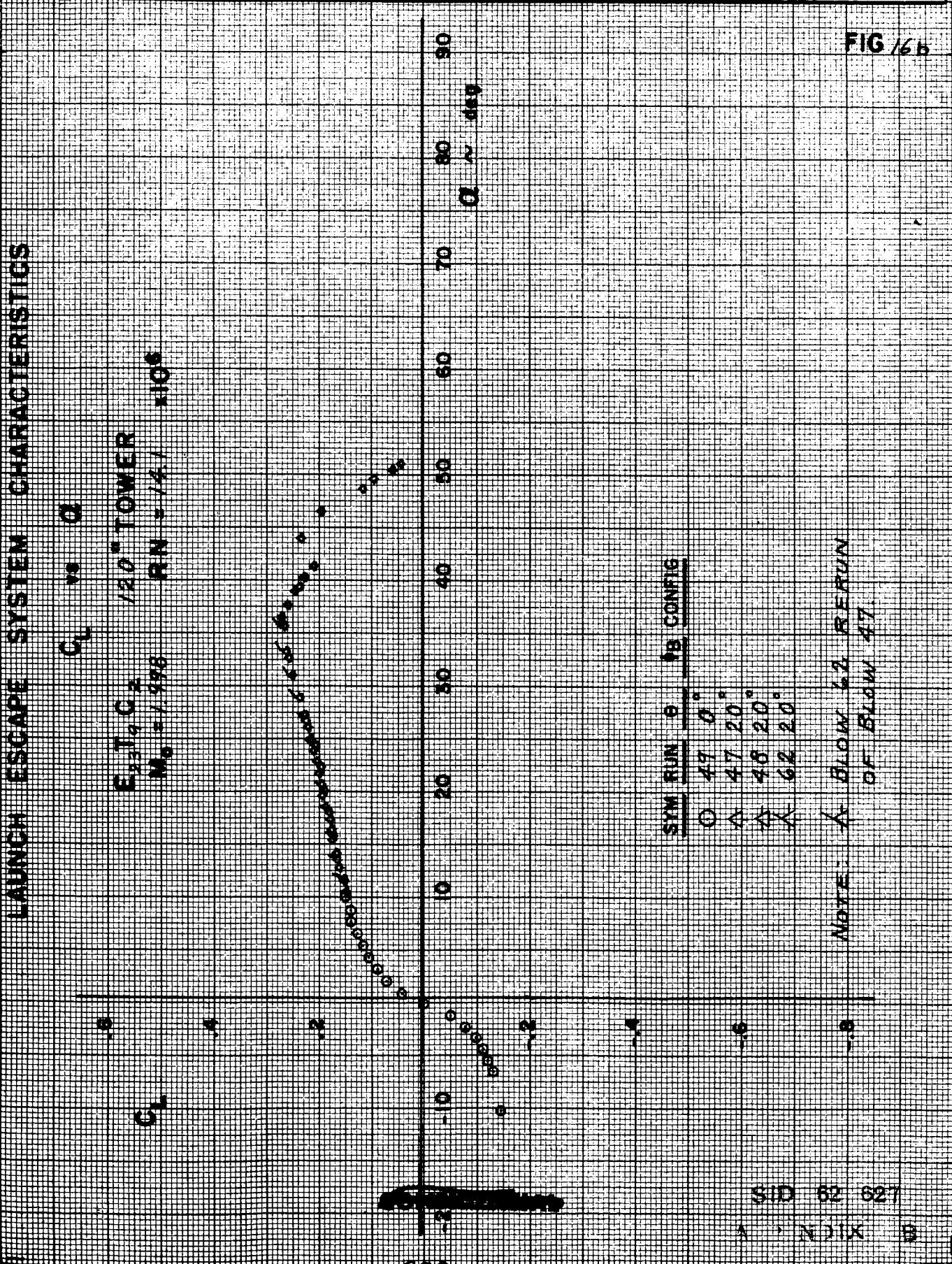
| | | |
|---|----|----|
| 0 | 49 | 0 |
| 4 | 47 | 20 |
| 4 | 45 | 20 |
| 4 | 62 | 20 |

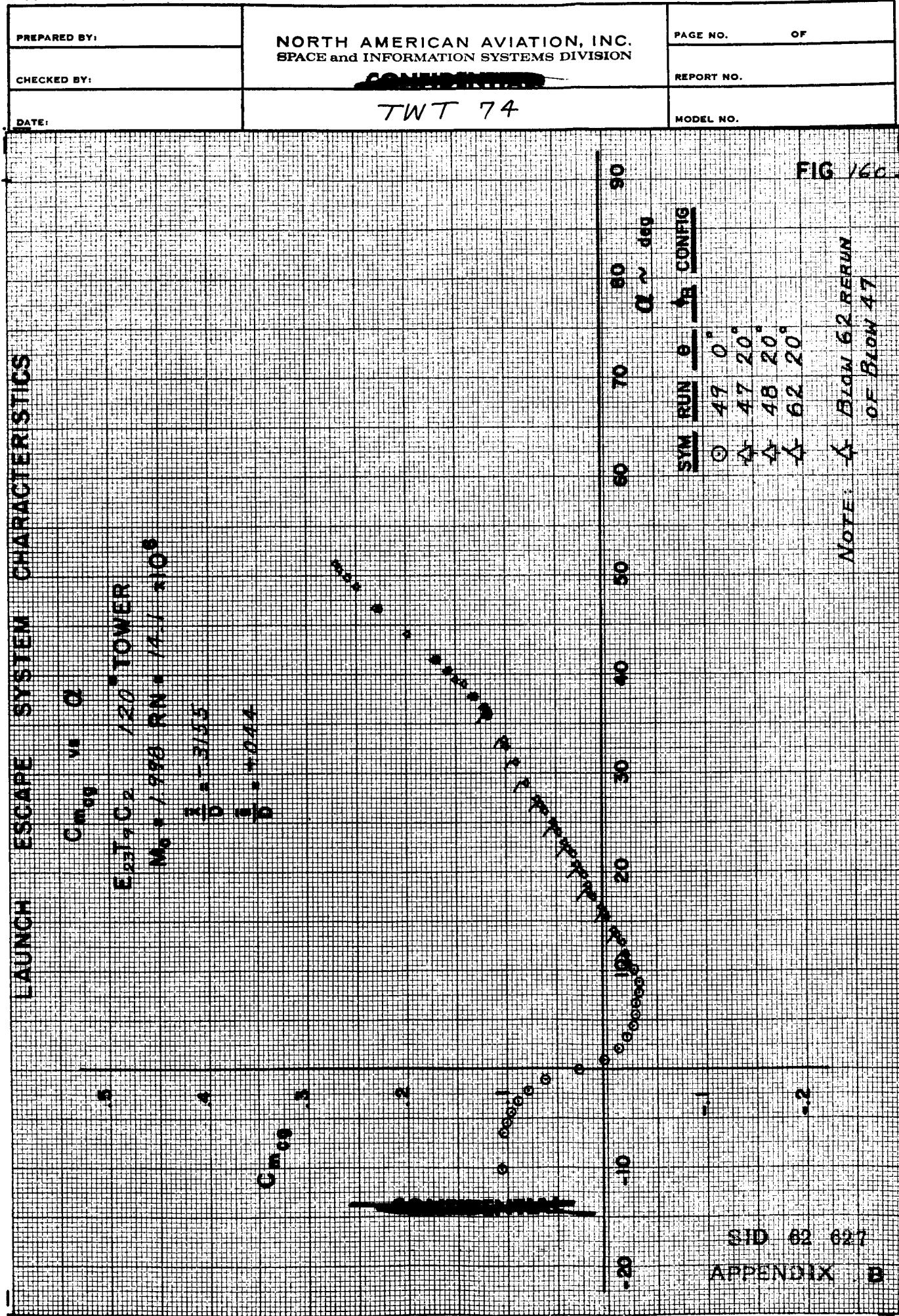
Note: Brian 62 RERUN
of Blow 47

Y-axis: C_D
X-axis: α (degrees)
Scale: 10 units per major tick mark

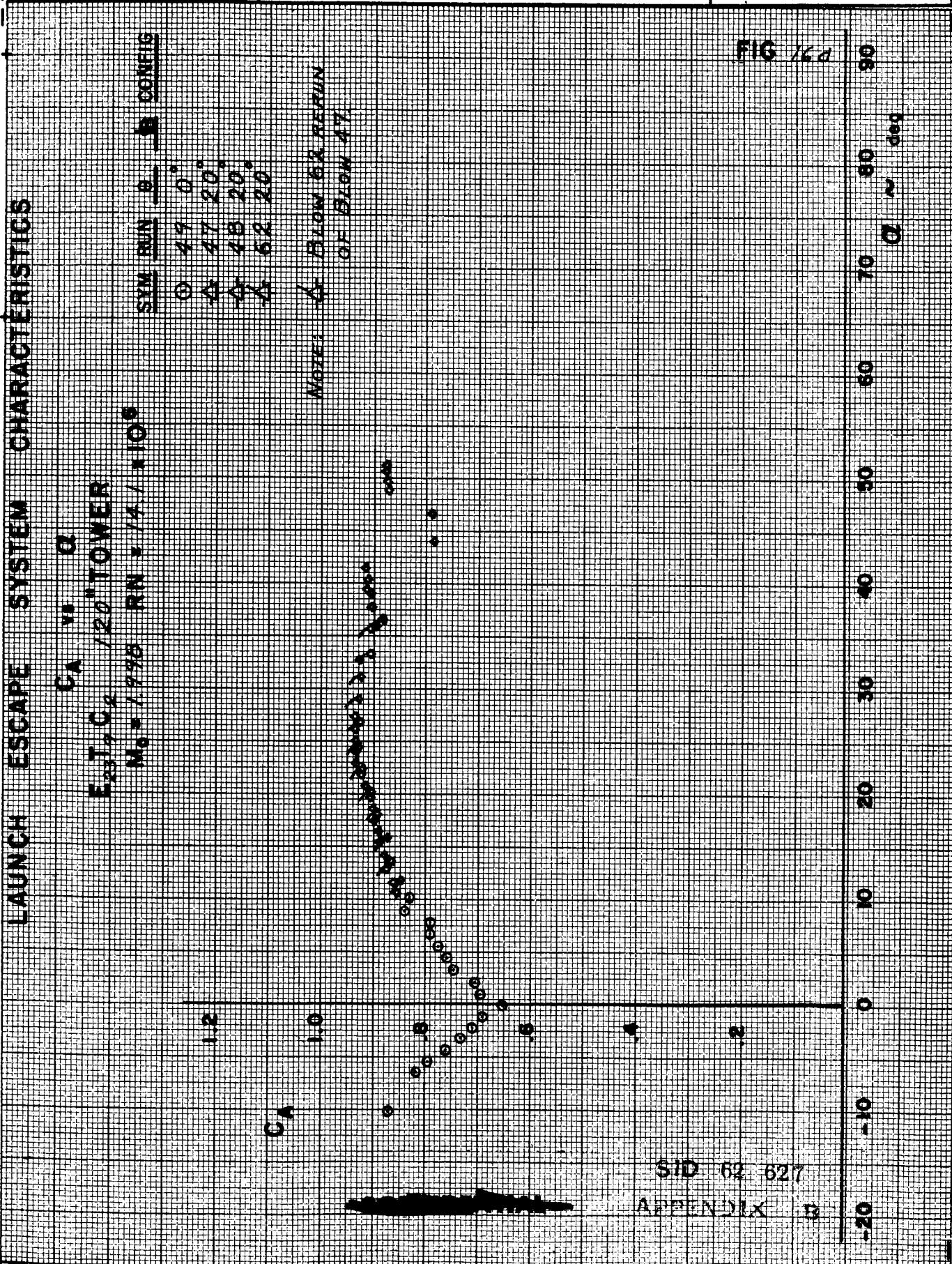
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LAUNCH POSITION CHARACTERISTICS

C_L vs Q



| | | | |
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FIG 16a

CN vs Q

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E₂₃₂ C₂ / 20' TOWER
W₀ = 1.990 RN = 14.3°

| SYN RUN | B | C | CONF |
|---------|----|----|------|
| ○ | 47 | 0 | |
| △ | 47 | 20 | |
| △ | 49 | 20 | |
| △ | 62 | 20 | |

NOTE: A Blow-off
at 34 sec 17

| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
|----|----|----|----|----|----|----|----|----|
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |
| ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

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APPENDIX B
-20

2

10

CN

232

| | | |
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WINGON ESCAPE SYSTEM CHARACTERISTICS

C_{m_A} vs C_2
 E-2217 C-2 1/22 POWER
 N.S. • 1/998 RN: 147 * 10*

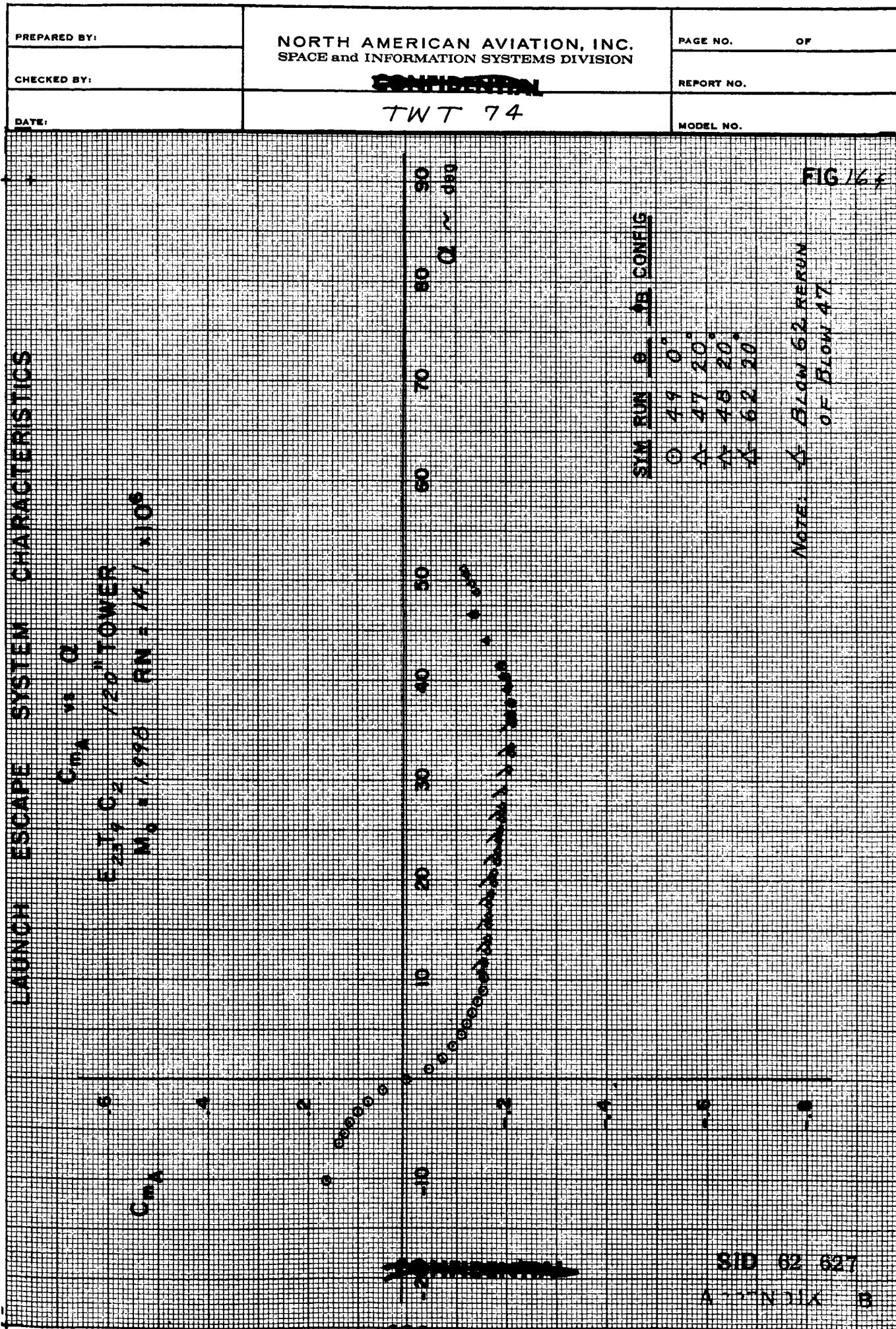


FIG 16

Note: Δ Blow 62 RERUN
 or Blow 47

SH 62 627

XLINE V

C_{mA} vs Q

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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E₂₃ T₂ C₂ M₀ = 1.7738 RN = 1.1204 TOVER = 1.204 $\frac{X_{CP}}{D}$

2

2

90
80
70
60
50
40
30
20
10
0
-10
-20

234

| $\frac{X_{CP}}{D}$ | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
|--------------------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SYM. ROLL | 0° | 49° | 37° | 48° | 62° | 49° | 37° | 48° | 62° | 49° |
| IN. CONE 3 | 0° | 0° | 20° | 20° | 0° | 0° | 20° | 20° | 0° | 0° |

FIG 16g

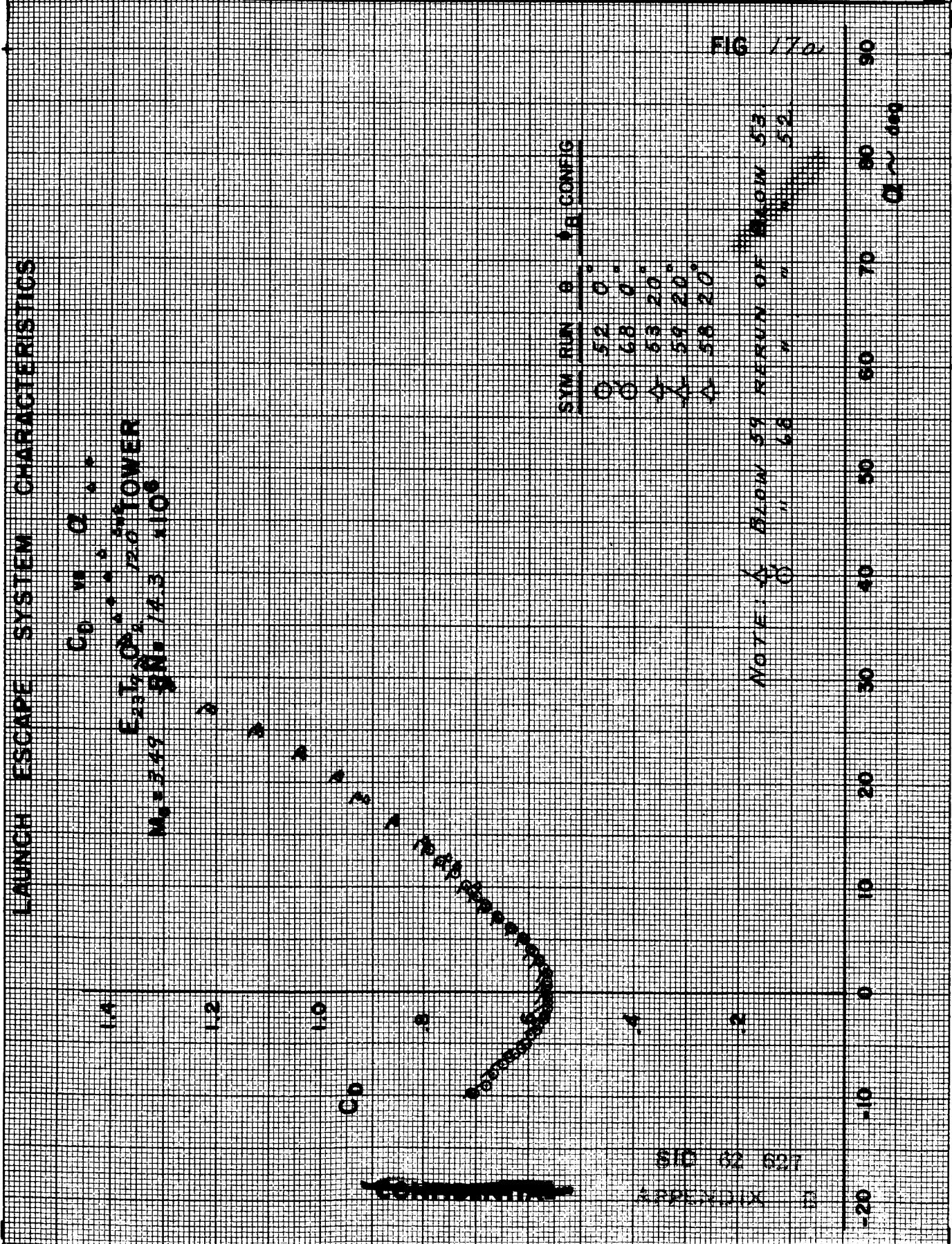
 $\frac{X_{CP}}{D}$ vs QNOTE: 46.01W 62.78R
3E 3E 22.22

NOTE:

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| | | |
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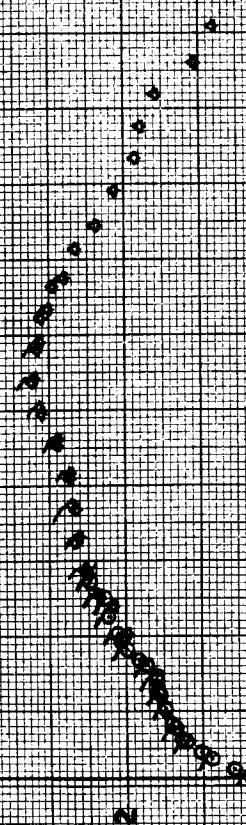
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

EST. CO₂ /20" TOWER
M₀ = 342 RN = 14.2 VOS

CL vs Q

CL



CL
10 20 30 40 50 60 70 80 90 100 deg

236

133-L ALGINENE TRACING PAPER-K. S. E. CO., REG. U. S. PAT. OFF.

SYM RIN θ V_B CONFIG

○ 52 0°
○ 68 0°
△ 53 20°
△ 59 20°
× 58 20°

NOTE: 47
18 " 59 PERUN OF BLOW 53
" 52 "

SID 62 627
APPENDIX B

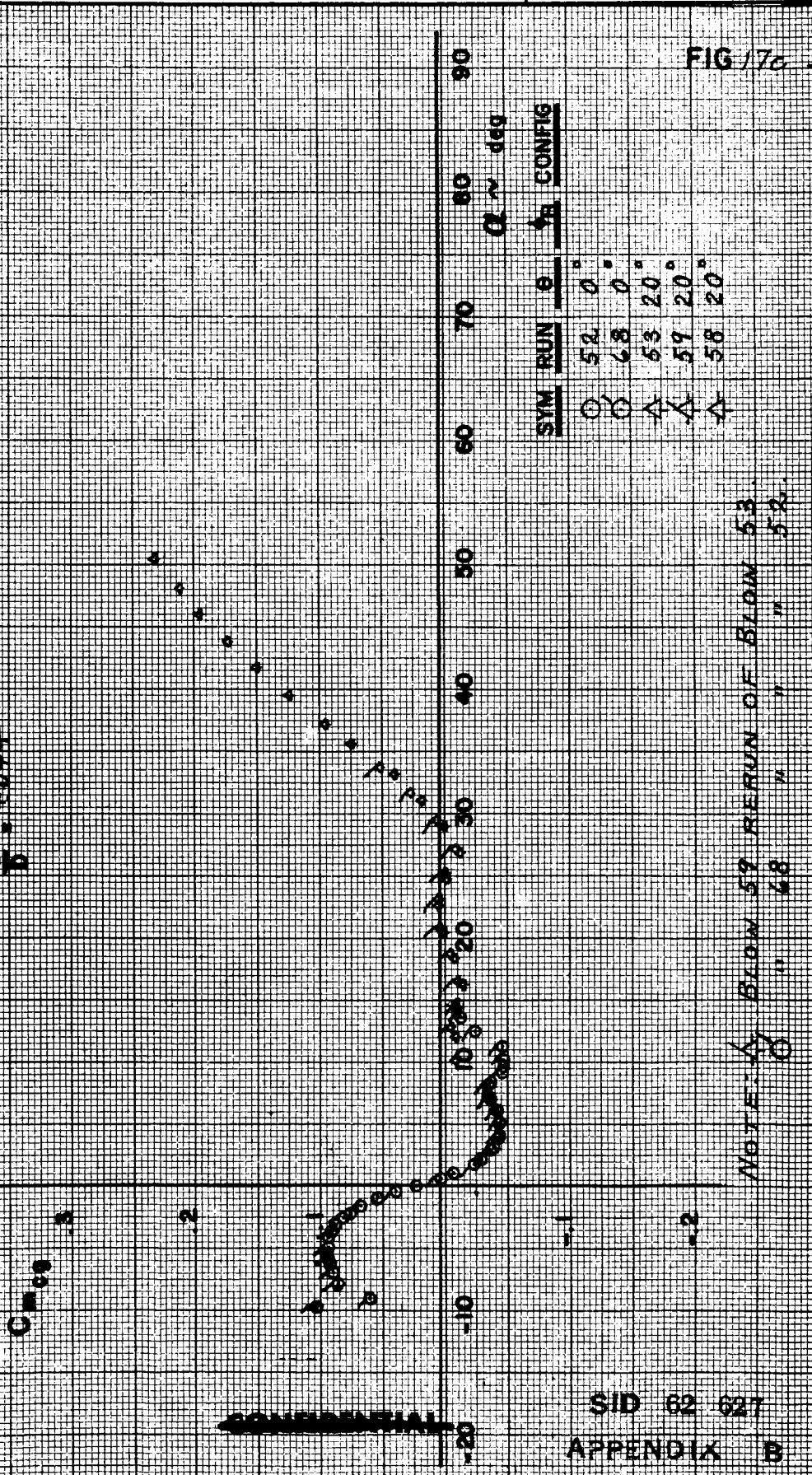
FIG 17b

CL vs θ

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{max} vs. *Q*
 E₂₃₇₄ G₂ 120° TOWER
 M₀ = 3.47 R N = 1.3 2108
C_{max} = 3/5.5



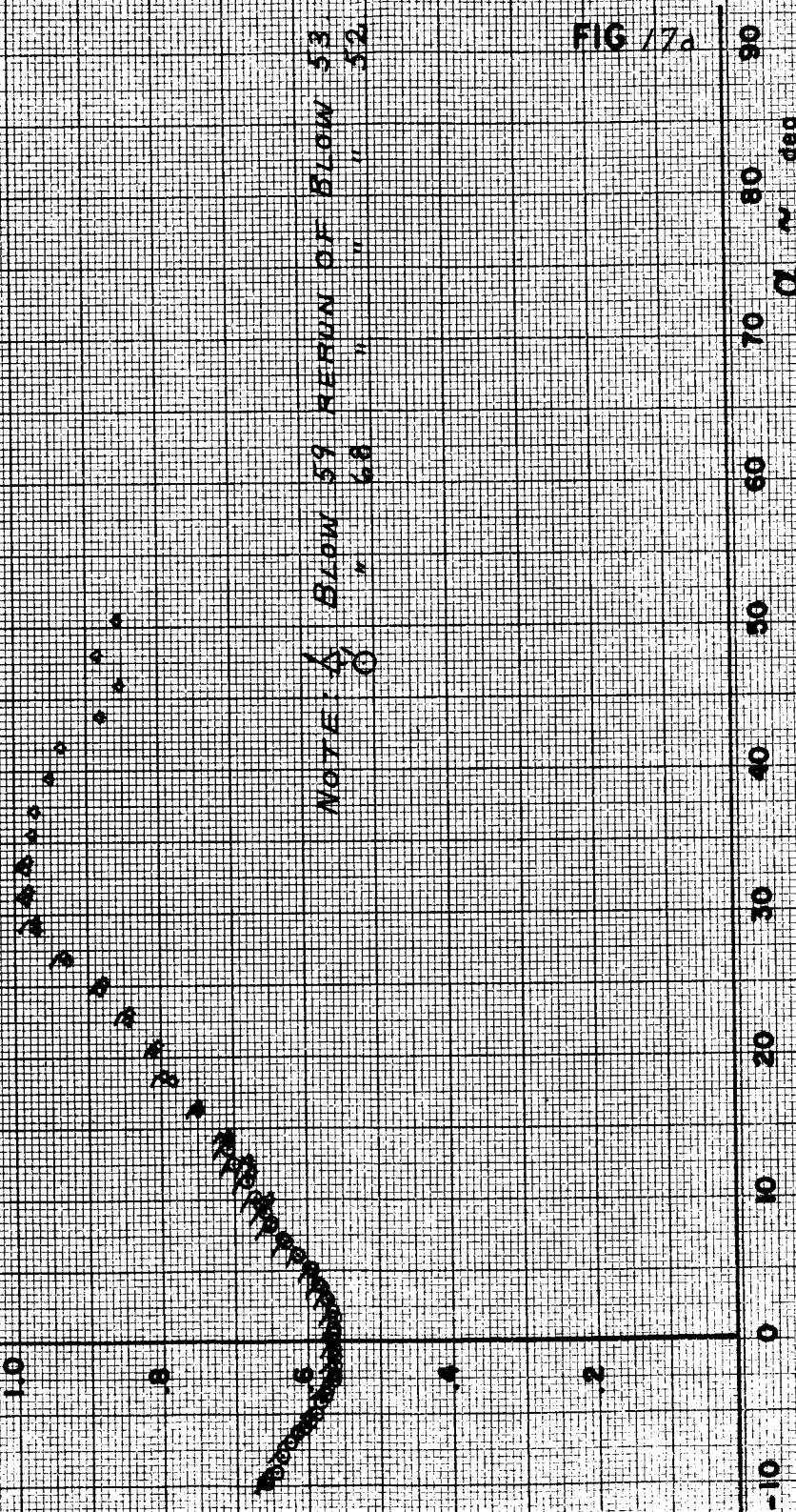
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

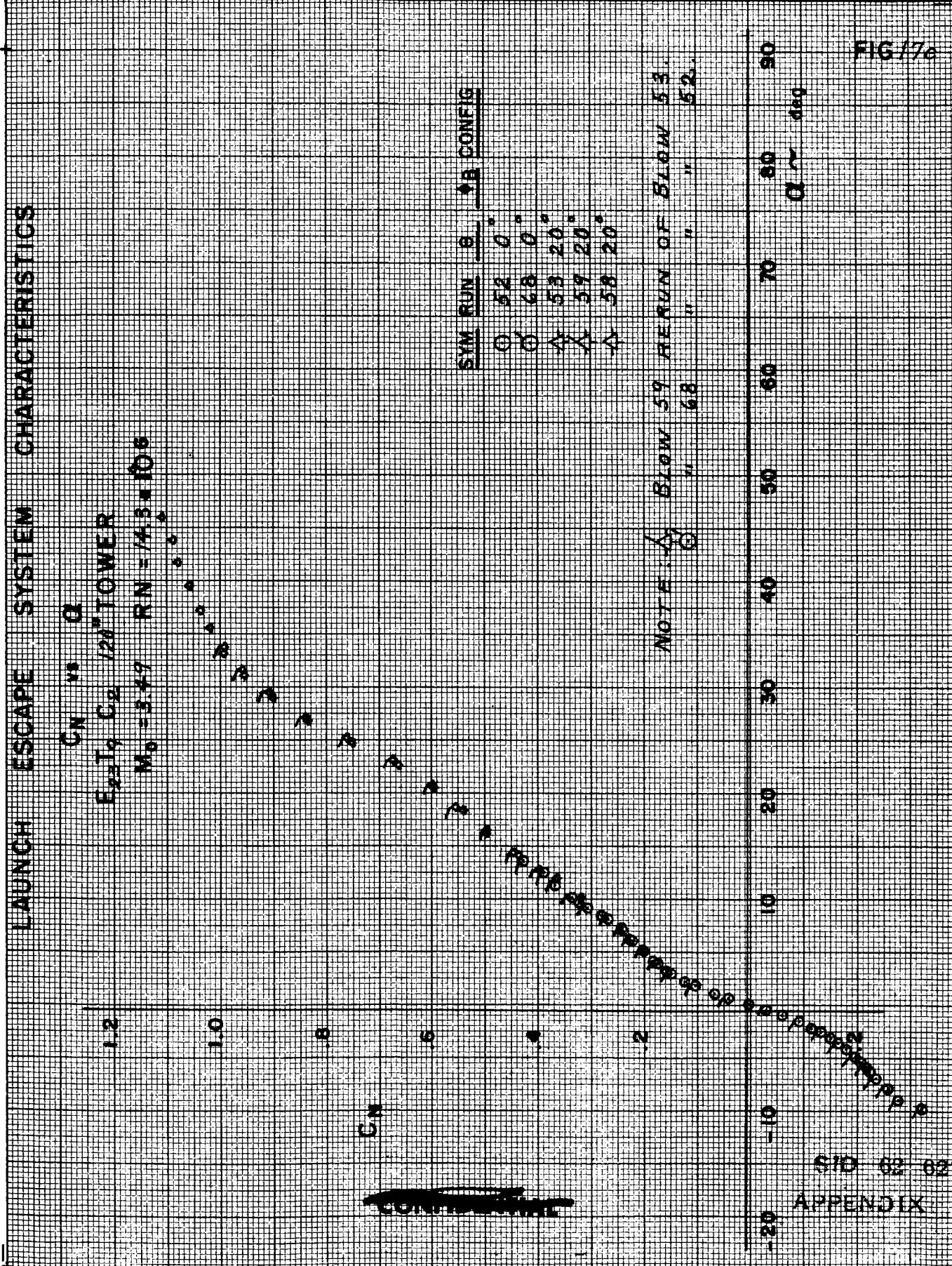
$E_2 T_2 C_2$ vs α
/20° TOWER
Mo = 342 RN = 14.3 * 10⁶

SYM RUN # & CONFIG

| | | |
|---|----|-----|
| 0 | 52 | 0° |
| 0 | 68 | 0° |
| 4 | 53 | 20° |
| 4 | 57 | 20° |
| 4 | 58 | 20° |

CA vs α

| | | | |
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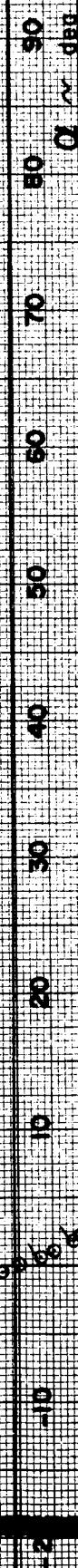


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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{m_A} vs. α
 G_2 , G_2 TOWER
 $M_a = 3.49$ $R_N = 14.3 \times 10^6$



SYM RUN # BE CONFIG

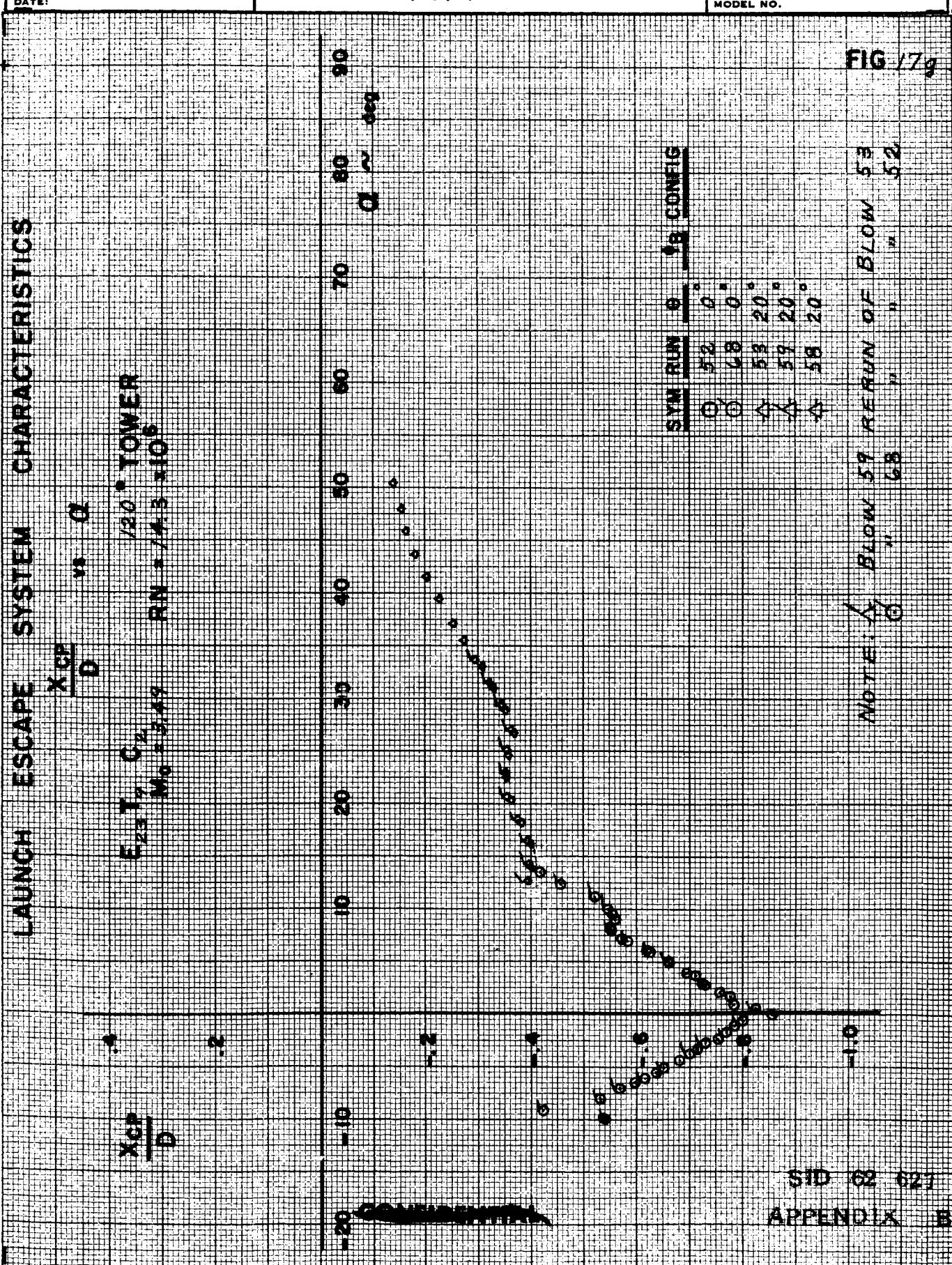
| SYM | RUN | # | BE | CONFIG |
|-----|-----|----|----|--------|
| 0 | 52 | 0 | | |
| 0 | 68 | 0 | | |
| 4 | 53 | 20 | | |
| 4 | 59 | 20 | | |
| 4 | 58 | 20 | | |

FIG 17f
 C_{mA} vs α
 NOTE: Δ BLOW 59 RERUN OF BLOW 53
 6.8 3.2

DIS 62 627

X-15 ANALYST A

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

N₂ = 0.72 E₂ T₂ C₂ / 20° TOWER

C₀ = 0.0

100 80 60 40 20 0 -20 -40 -60 -80 -100

SYM RUN # 13 CONFIG

O 24.0°
△ 37.0°

FIG 1B-a

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APPENDIX E

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

Cd vs Q

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_L vs α

EATON TOWER
120' TOWER
 $M_0 = 0.72$ RN = 73.4 g's

C_L

10 20 30 40 50 60 70 80 90 100

243

SIM RUN # B CONFIG

① 24 0°
△ 37 20°

112 62 627

KELVIN HAWKINS

FIG 18b

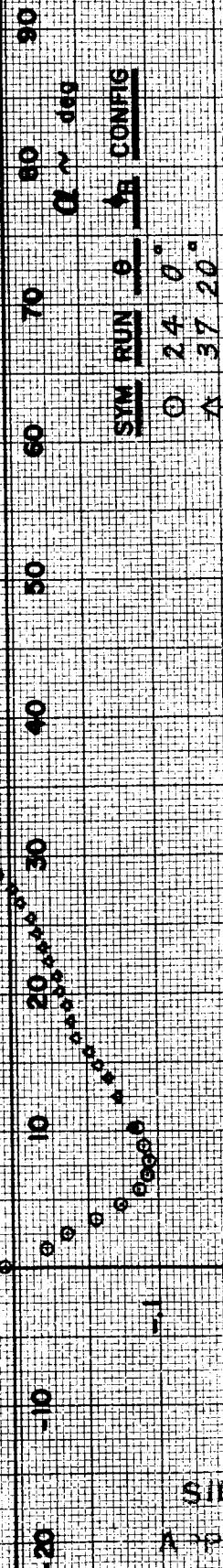
C_L vs α

| | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

EAST TOWER 120° TOWER
 $M_a = 0.72$ $R_N = 13.4 \times 10^6$
 $\frac{M_a}{R_N} = 3.55$
 $\frac{M_a}{R_N} + 0.44$ $C_m c_g$ $C_m c_g$  $C_m c_g$ vs. α

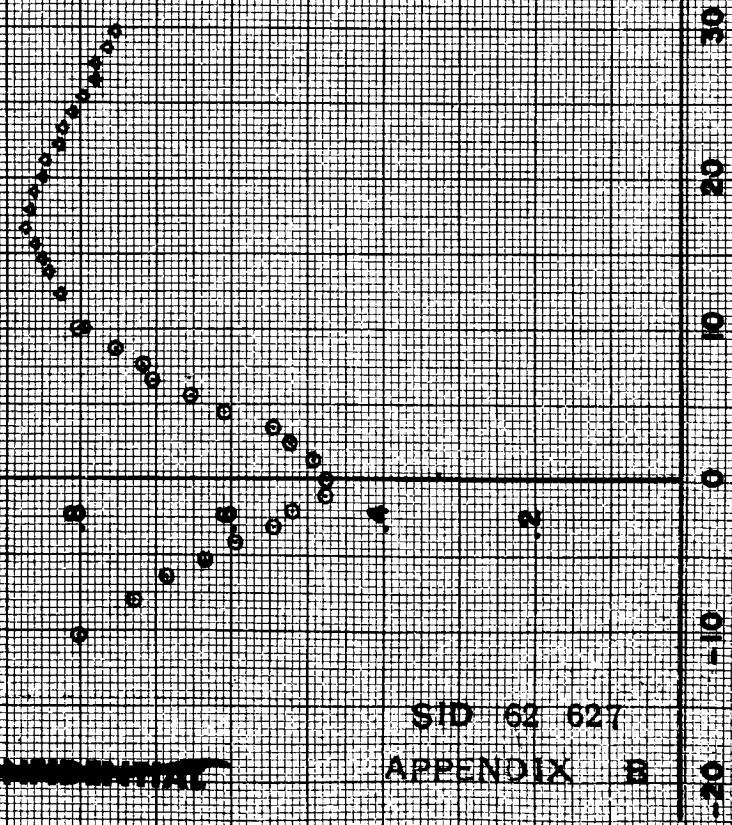
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

CA = C₁
 E₂T₂ C₂ /22" TOWER
 Mo = 0.72 PRN = 3.7 X 10⁵

SYM RUN # - CONFIG

O 24 0°
 X 37 20°



| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_N vs C_2 / $20''$ TOWER
 E_{25-T} $\mu_0 = 0.72$ RN = 754 * 10⁻⁶

1.2

1.0

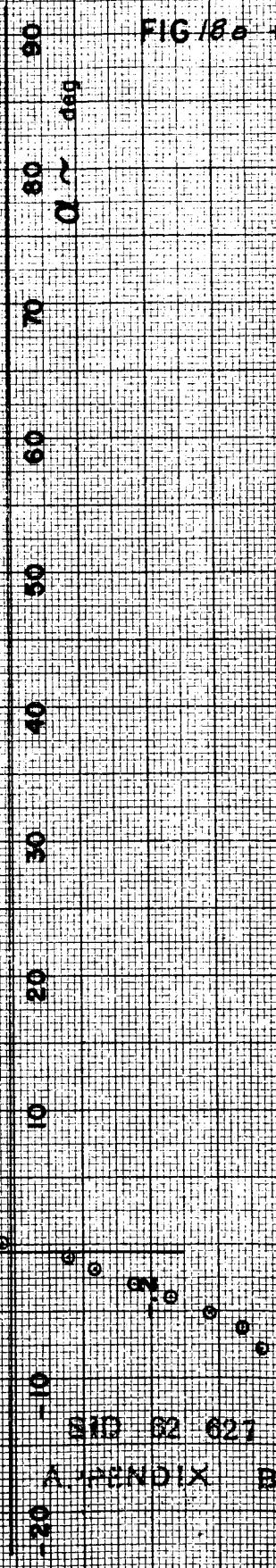
C_N

SYM RUNS
TESTS

*B CONFIGS

37 20

42 0

C_N vs α

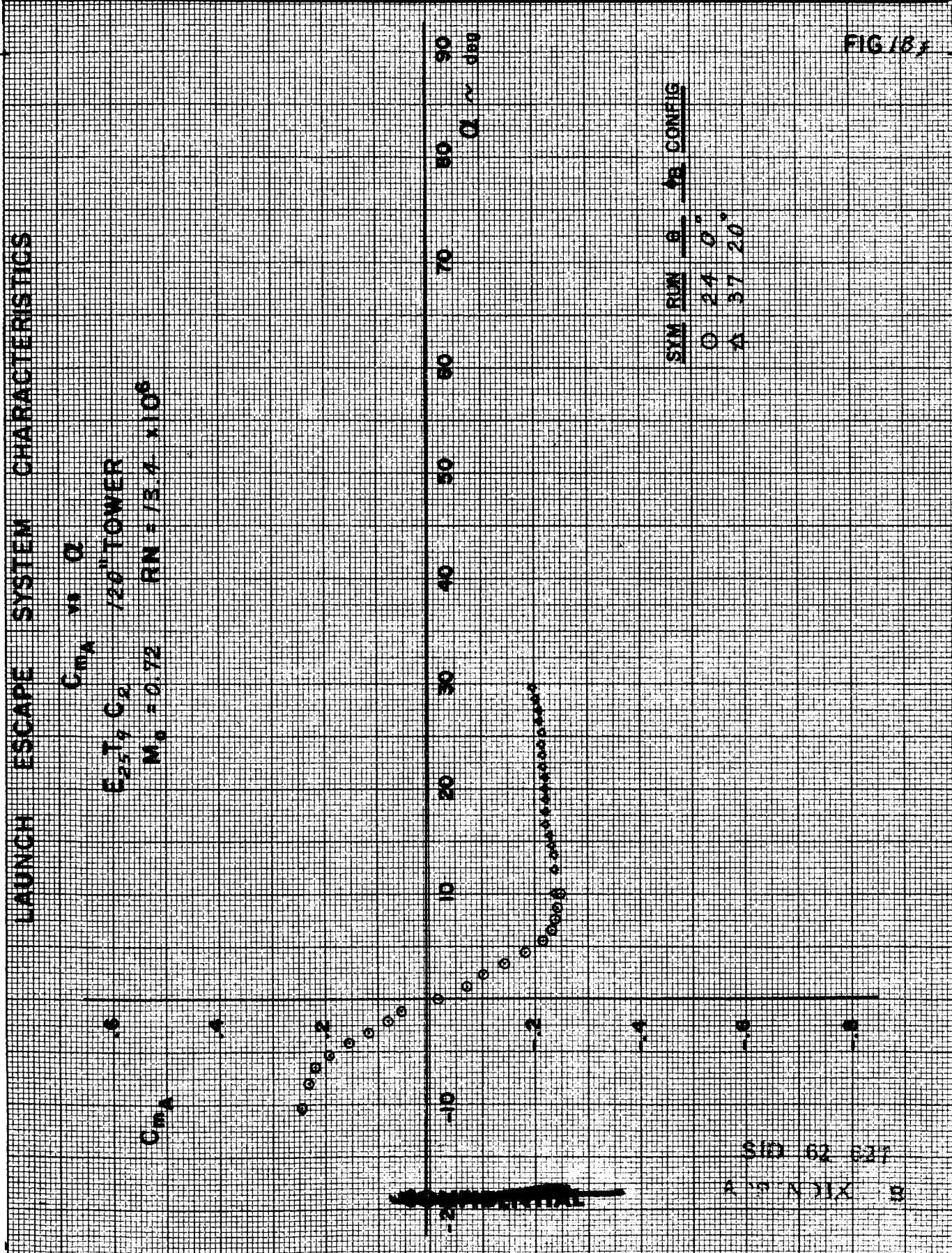
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FIG 18

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{MA} = 0.72
 $E_2 T_2 C_2$ / 2²" TOWER
 $M_{Ls} = 0.72$
 $RN = 13.4 \times 10^6$



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FIG 184

 $\frac{X_{CP}}{D}$

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 $E_{25} T^2 C^2$
 $M_o = 3.72$
 $R_N = 1.34 \times 10^6$
 $R_T = 1.20 \times 10^6$
 $\frac{X_{CP}}{D}$ $\frac{X_{CP}}{D}$ 80
60
40
20
-20
-40
-60
-80

SYN RIN 9 12 CONES

 $O 24 0^\circ$
 $\Delta 37 20^\circ$

312 52 627

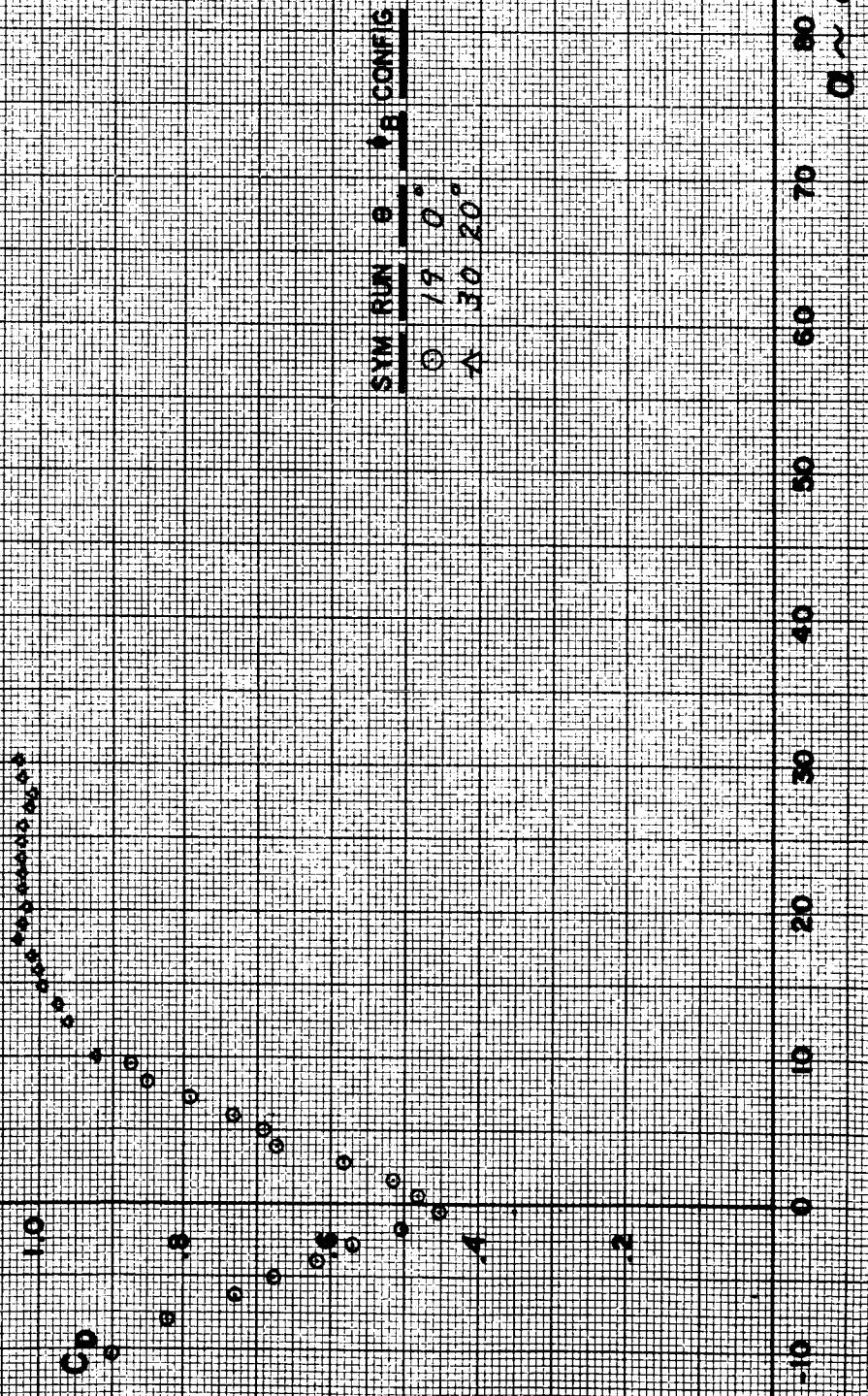
E X C H E C K A

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 $C_D \text{ vs } Q$

$C_2 = 0.7$ $C_{25} = 0.9$ $R_N = 1/4$ $\alpha_{LOS} = 20^\circ$ TOWER



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 $C_D \text{ vs } Q$

| | | |
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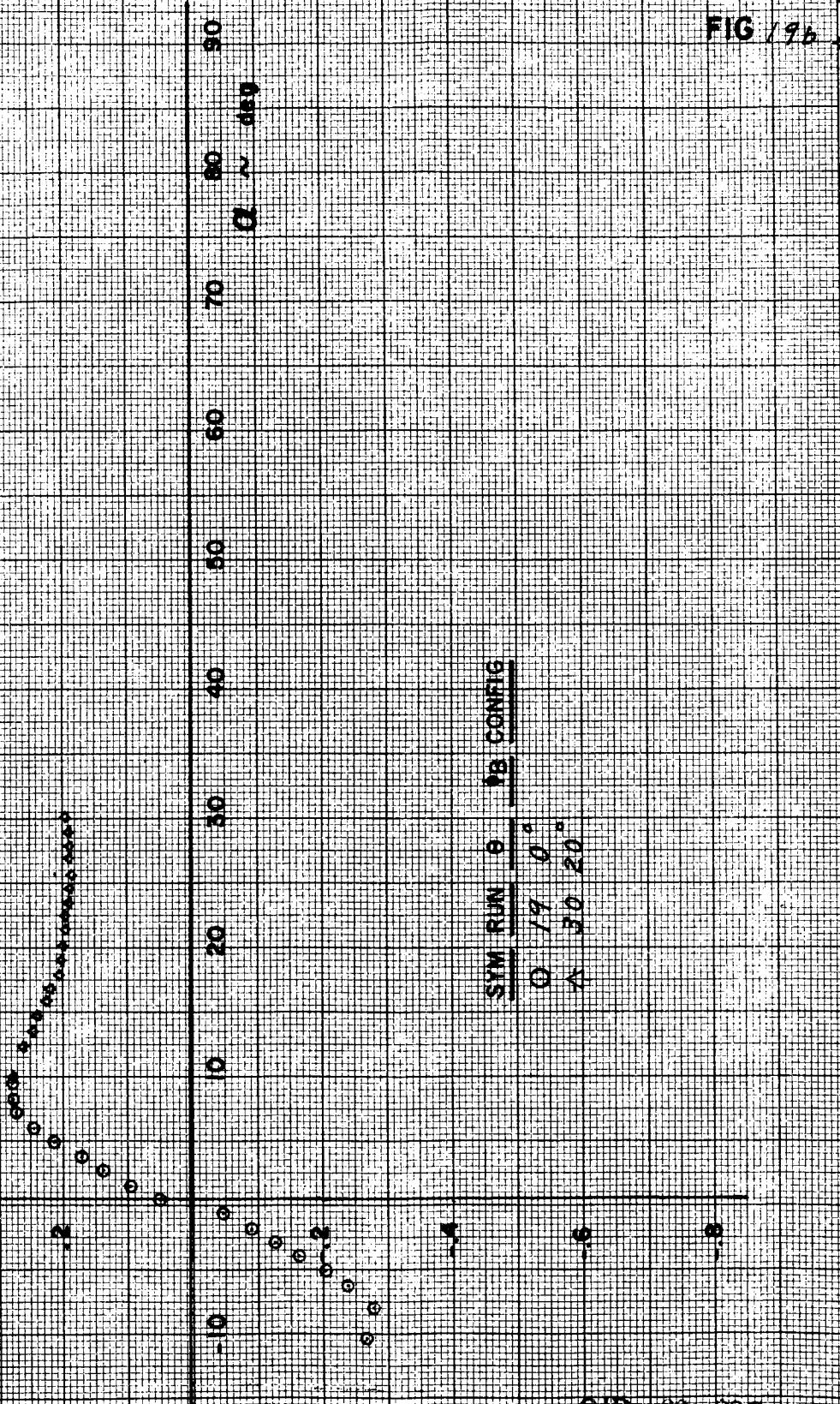
LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$E_{\text{eff}} = C_R \cdot R_N = 1/4 \cdot 1000$
 $M_0 = 0.9$

120" TOWER

C_L vs α

C_L vs α



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APPENDIX B

 C_L vs α

FIG 19b

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E2T₂C₂ 720' TOWER
NO. 3 74 RUN - 3/35

3/35

3/35

C₂C₂

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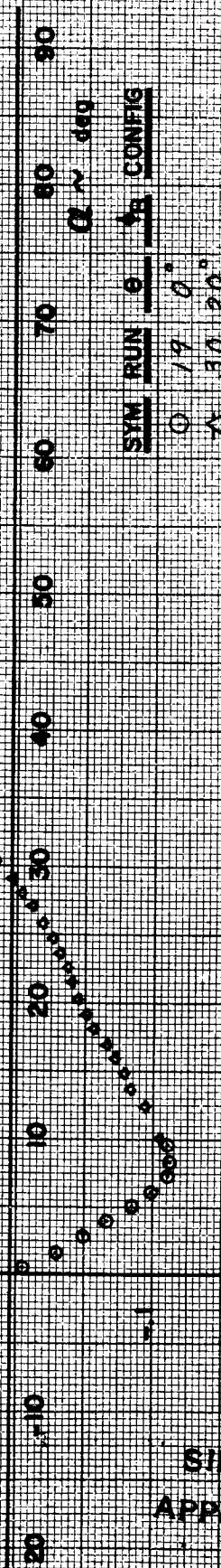
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FIG 19a

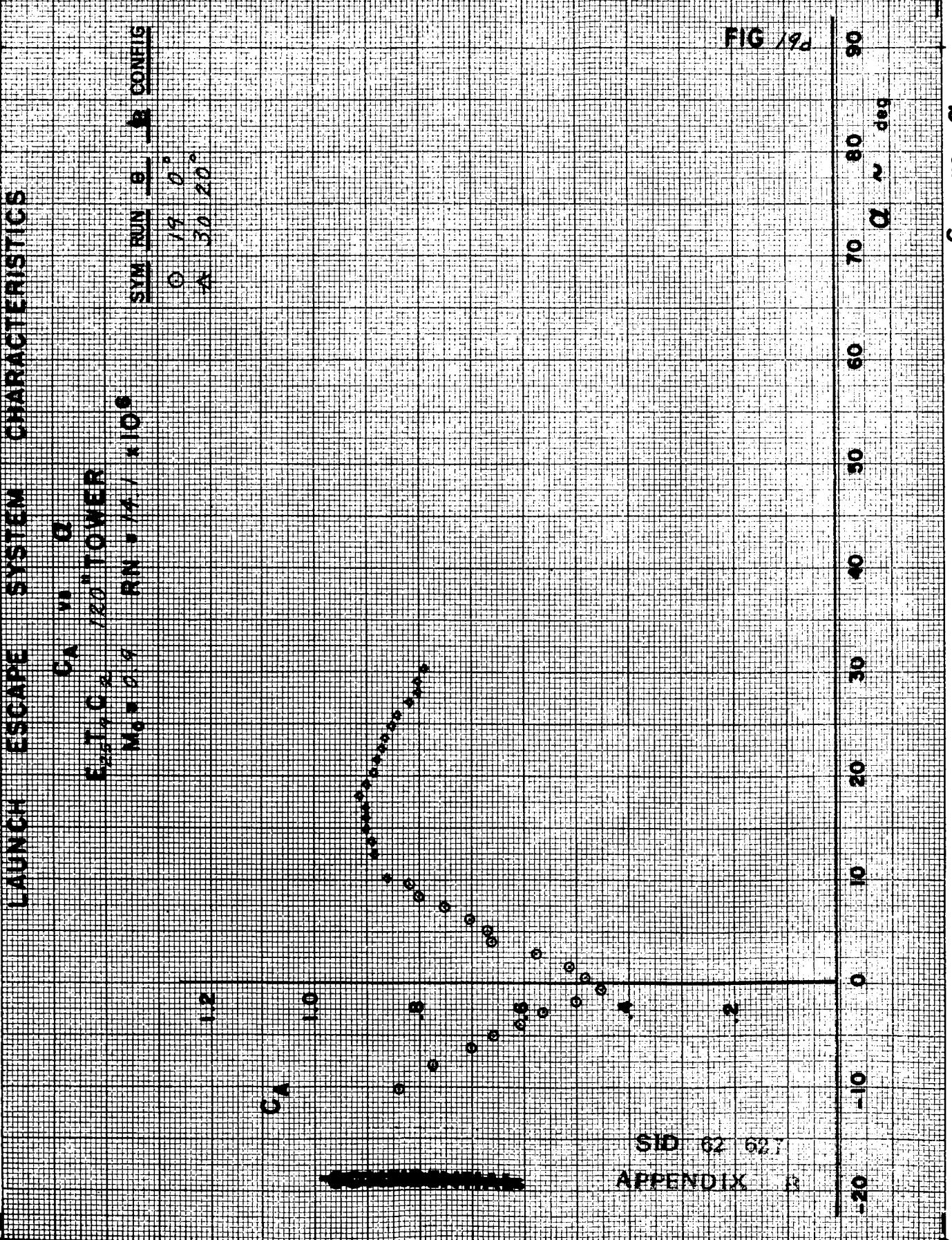
C_{mg} vs Q



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APPENDIX E

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$E_2 T_2 C_2 / 20^{\circ}$ TOWER
 $M_0 = 0.4 \quad RN = 1/4 \times 10^6$

1.2

1.0

C_N

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SYM RUN # 4B CONFIG

O 14 0°
 A 30 20°

10 20 30 40 50 60 70 80 90
 $\alpha \sim \text{deg}$

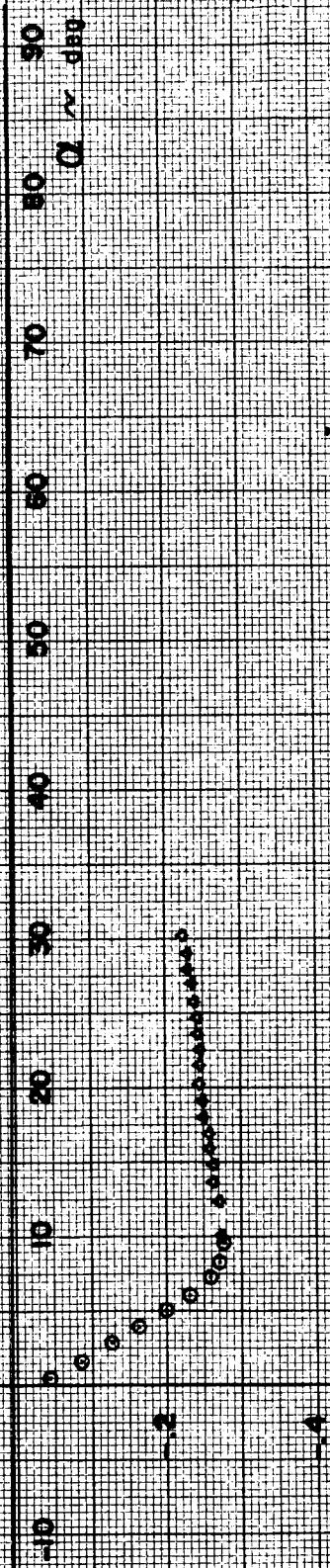
FIG 7a

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| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$E_2 T_4 C_2$ vs Q
 $1/20^{\circ}$ TOWER
 $M_0 = 0.9$ $RN = 14.1 \times 10^6$

 C_{ma} 

SYM ROLL

+ CONES

C 1/2 0

A 30 20

FIG 19E

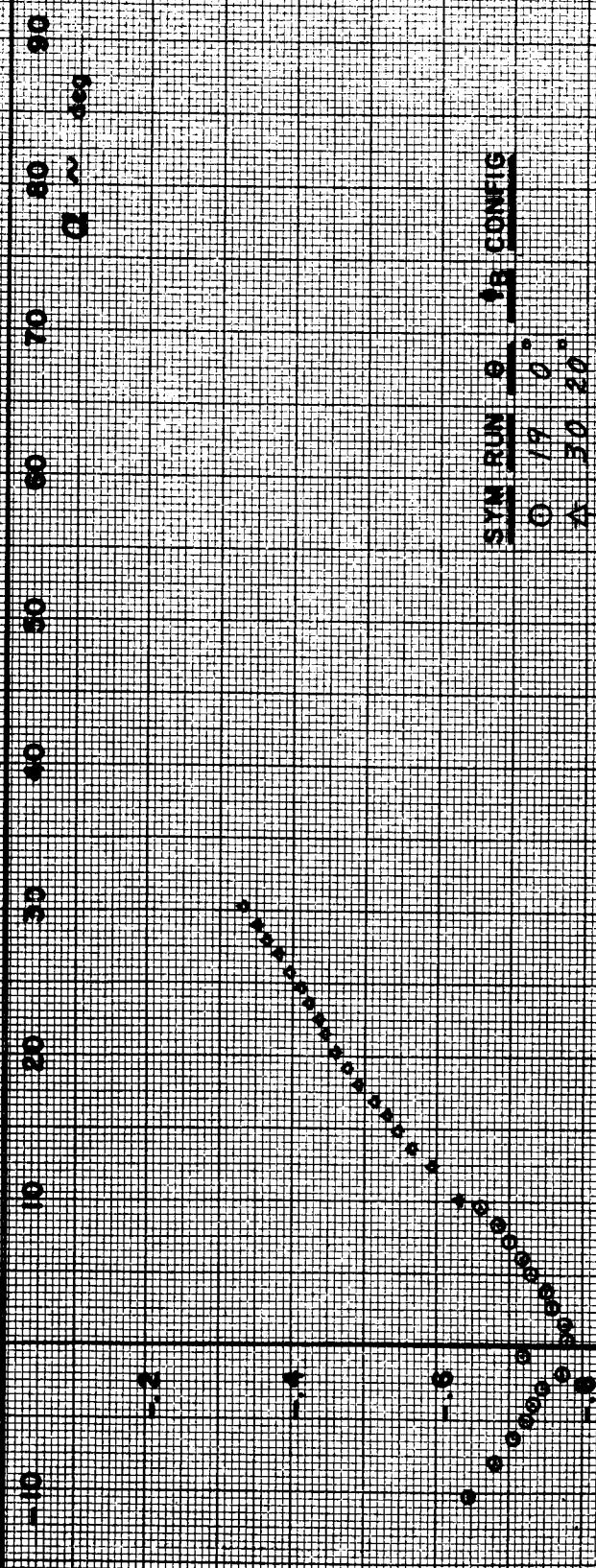
 C_{ma} vs Q

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A MAX B

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 $\frac{X_{CP}}{D}$ E_{2.5} T₂ C_{2.5} M_{2.5} S_{2.5} /20° TOWER
SN 37421 SHOTS $\frac{X_{CP}}{D}$ 

SYN RUN 9-15 CONFIG

| | |
|---|----|
| ○ | 17 |
| △ | 30 |
| ○ | 20 |

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APPENDIX E

 $\frac{X_{CP}}{D}$ vs C

FIG 179

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FIG 20a

Cd vs Q

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_d vs Q
 E_T T₂ C₂ / 20 "TOWER
 M₀ = 1/2

1.4

1.2

1.0

Cd

SYM RUN 9 • B CONFIG

29 0°
 41 20°
 0 4

90
 80
 70
 60
 50
 40
 30
 20
 10
 0
 -10
 -20

SID 62 627
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| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 q_s

E₂₅T₂C₂
M₆ = 1/2
RN = 14.2 - 104

 C_L

120° TOWER

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0 10 20 30 40 50 60 70 80 90 100
deg

SWI RUN 0° TO CONIC
 24° 0°
 21° 20°

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X-15 APPROX

FIG 20b

 C_L vs α

| | |
|--------------|--|
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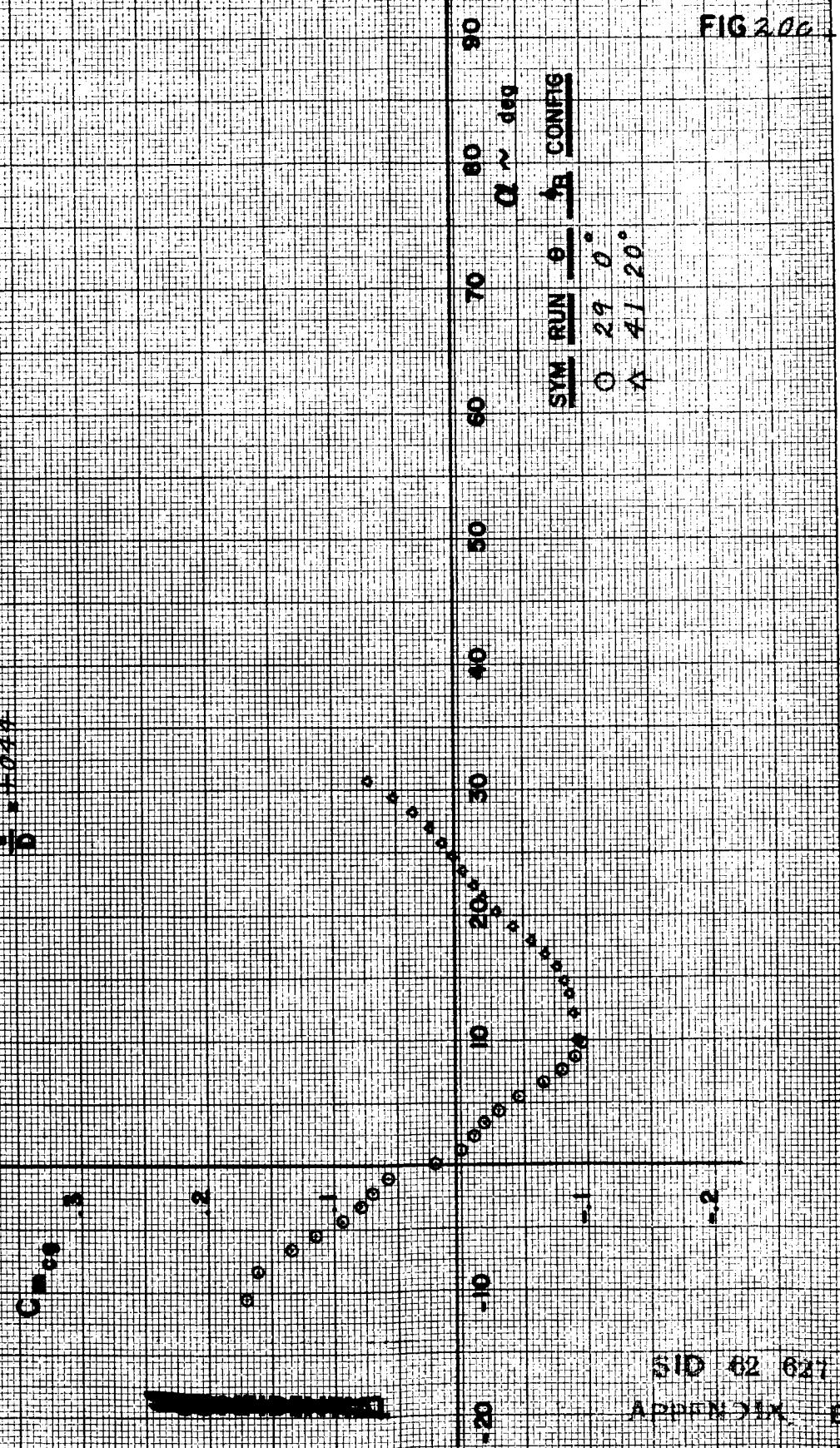
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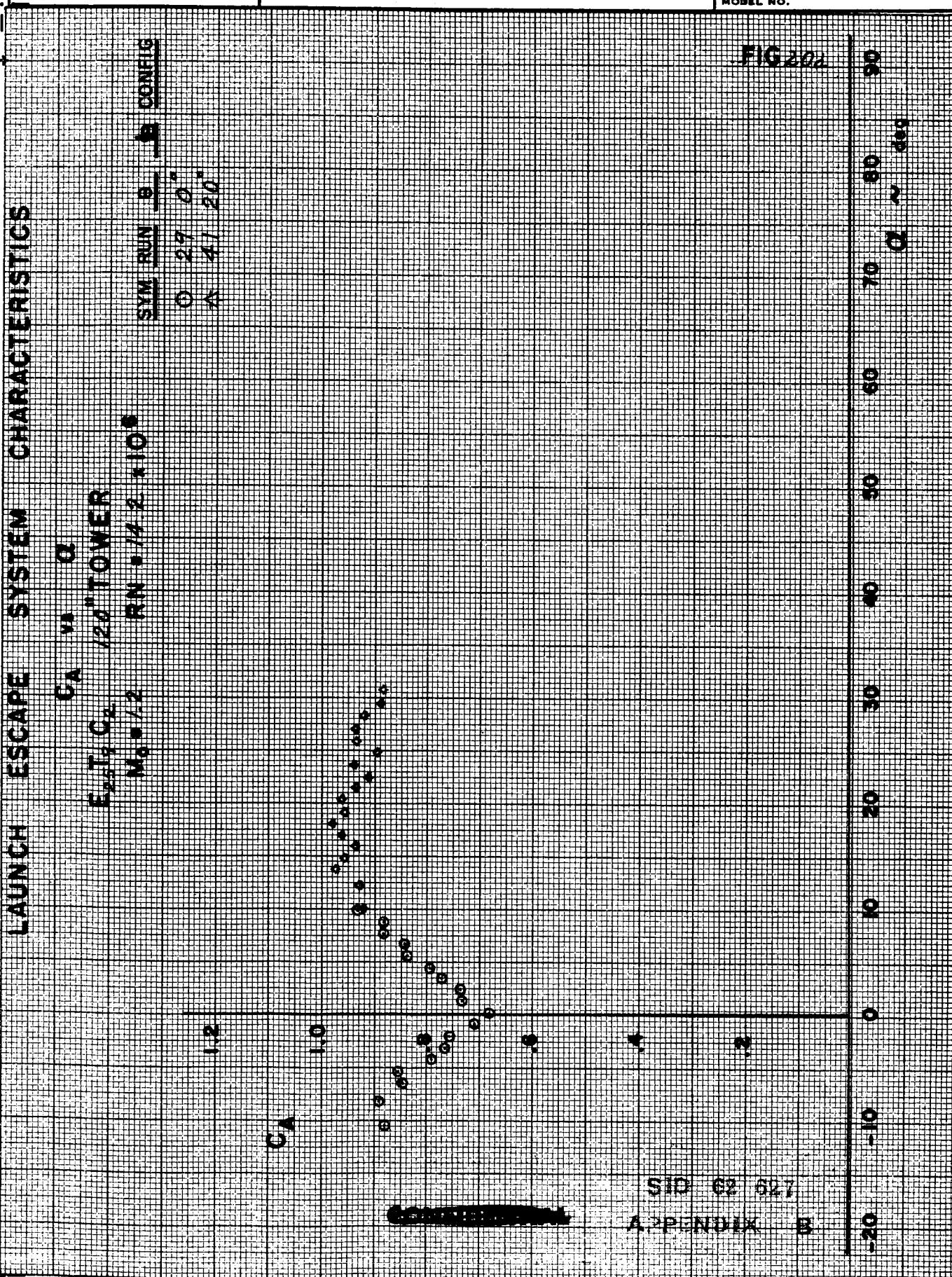
TWT 74

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E_{2.5}T₂C₂ 120' TOWER
 MN₀ 1/2 RN 1/2 3/55
 $\frac{1}{2}$ ± 0.04%

C_mc_g vs Q

| | | | |
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TWT 74

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_N vs α
 $E_a T_1 C_2 / 20^{\circ}$ TOWER
 $R_N = 1/4.2 \times 10^8$
 $M_o = 1/2$

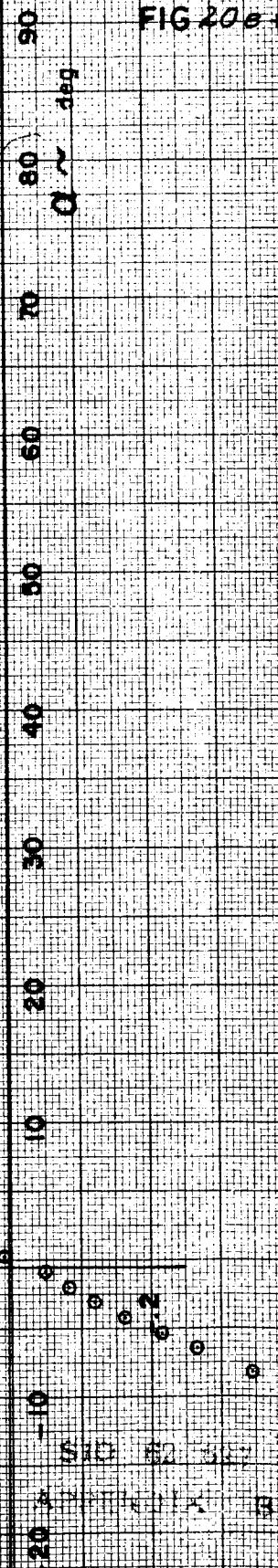


FIG 200

 C_N vs α

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{mA} vs. Q

E₂₅T₁C₂
72" TOWER
M₀ = 1/2
RN # 142 1108

C_{mA}

10 20 30 40 50 60 70 80 90 Q vs. deg

SIM RUN #

O 29 0°
Δ 41 20°

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APPENDIX B

FIG 20F

C_{mA} vs. Q

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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

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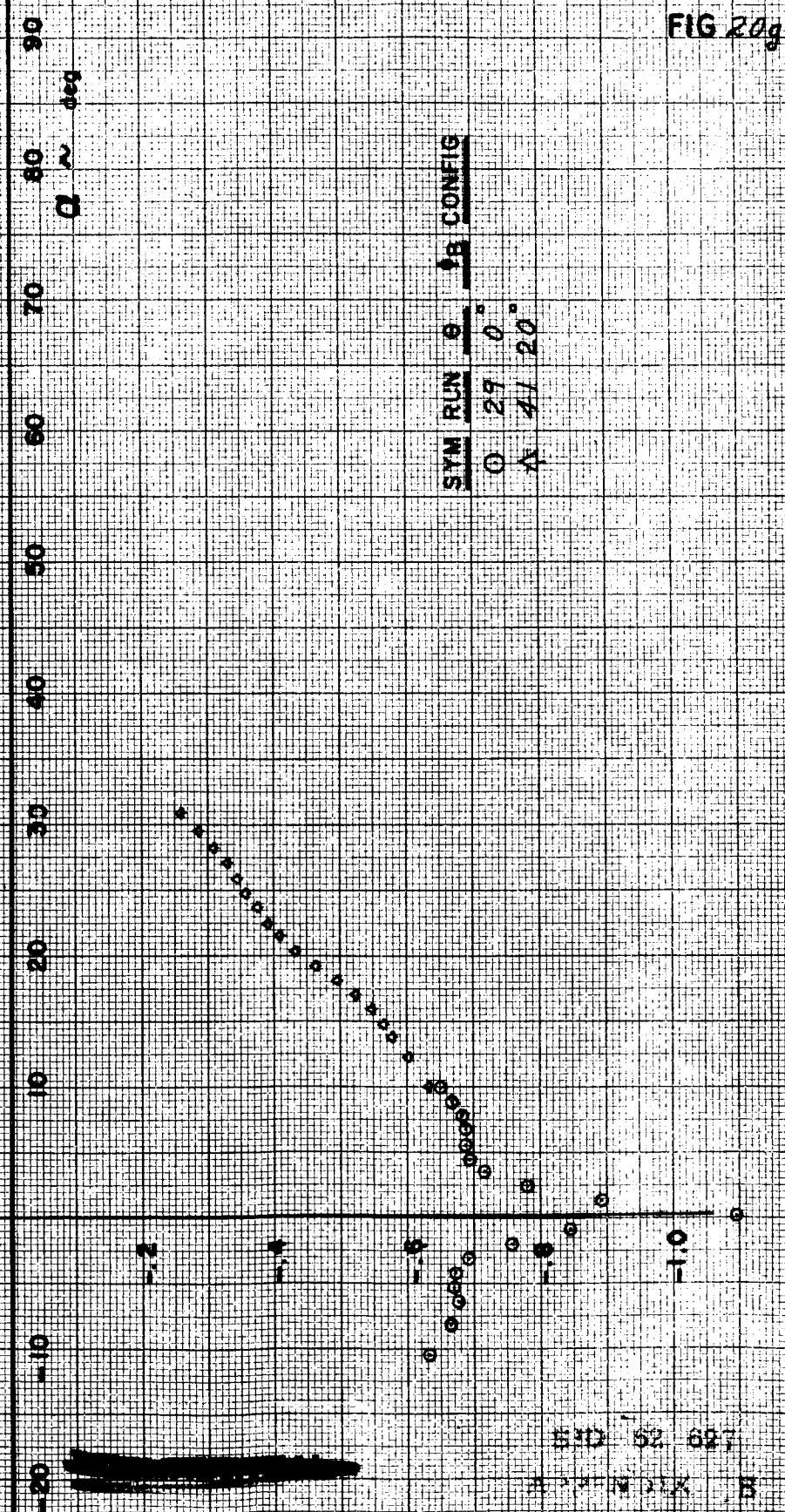
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FIG 20g

 $\frac{X_{CP}}{D}$ vs α

120° TOWER
 14.2 NHO
 RN = 1.2

C₂₅T₂C₂
 M₀ = 1.2



| | | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C₀

ϵ_{25} , T₄, C₂, 1/20 TOWER
 $\eta_{0.2} = 1/5.3$, $\eta_{0.4} = 1/4.0$, $\eta_{0.6} = 1/3.0$

1.2

1.0

0.8

0.6

0.4

0.2

0.0

SYM RUN

0° 7° 12° 20°

A

C

FIG 21a

C_D vs Q

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| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E_{25T₄} C₂ 120° TOWER
 $M_a = 1.53$ $R_N = 14.0 \pm 10\%$

 C_L

-10 -8 -6 -4 -2 0 2 4 6 8 10

-10 -8 -6 -4 -2 0 2 4 6 8 10

SYM RUN # 1a CONFIG

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

SAD 52 64

A 15 N 15 E 15

FIG 216

C_L vs α

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{meq} vs QEAT/C2 TOWER
M6 1/53 RN 14.0 * 0.8 $\frac{1}{5} \times 1.55$
 $\frac{1}{5} \times 2.47$ C_{meq}NORTH AMERICAN AVIATION, INC.
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FIG 21a

SIM RUN 8 CONFS

SIM

RUN 8

0 7 0°

A 1/2 20°

60 80 70 60 50 40 30 20 10 -10

8

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C_{meq} vs Q

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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

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FIG 21a

CA vs Q

CA = V_A
 $E_{22} T_2 C_{22}$
 72° TOWER
 $M_0 = 1.53$ R/N $\pm 4.0 \times 10^6$

SYM RUN # 5 CONFIG

0 7 0°
 4 1/2 20°

Launch Escape Space

CA

1.0

200

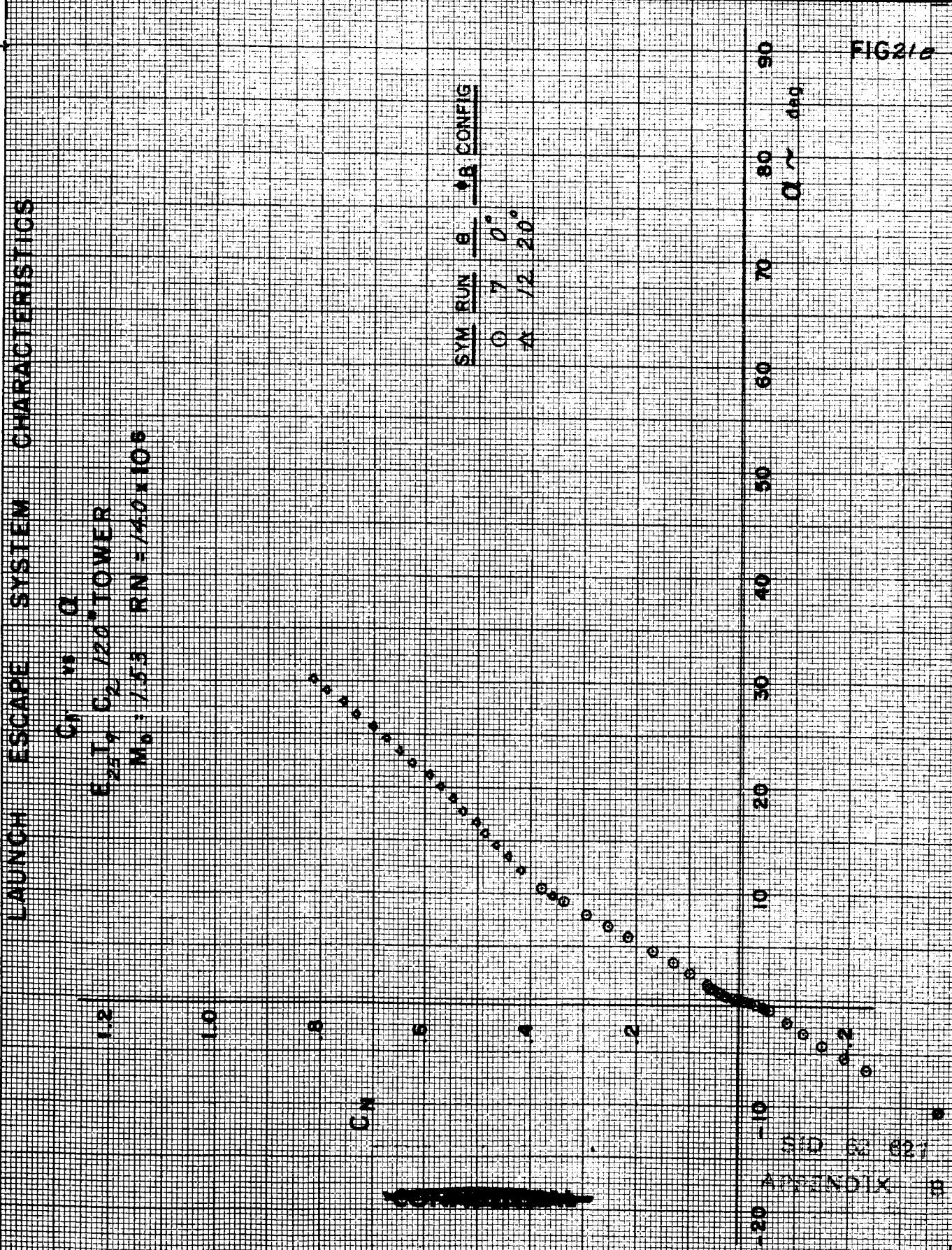
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90
 80
 70
 60
 50
 40
 30
 20
 10
 0
 -10
 -20

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$E_{22} T_9 C_2 1/20 TOWER$
 $M_6 = 1/53 \text{ RN} = 140 \times 10^5$

 $G_1 \approx G_2$ 

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$E_{25T} = 120^{\circ}$ TOWER
 $M_A = 1.53$ $RN = 14.0 \times 10^6$

 C_{m_A}

90
80
70
60
50
40
30
20
10
0

268

SYM SUN θ CONFIG

O 4 0°
 A 1/2 20°

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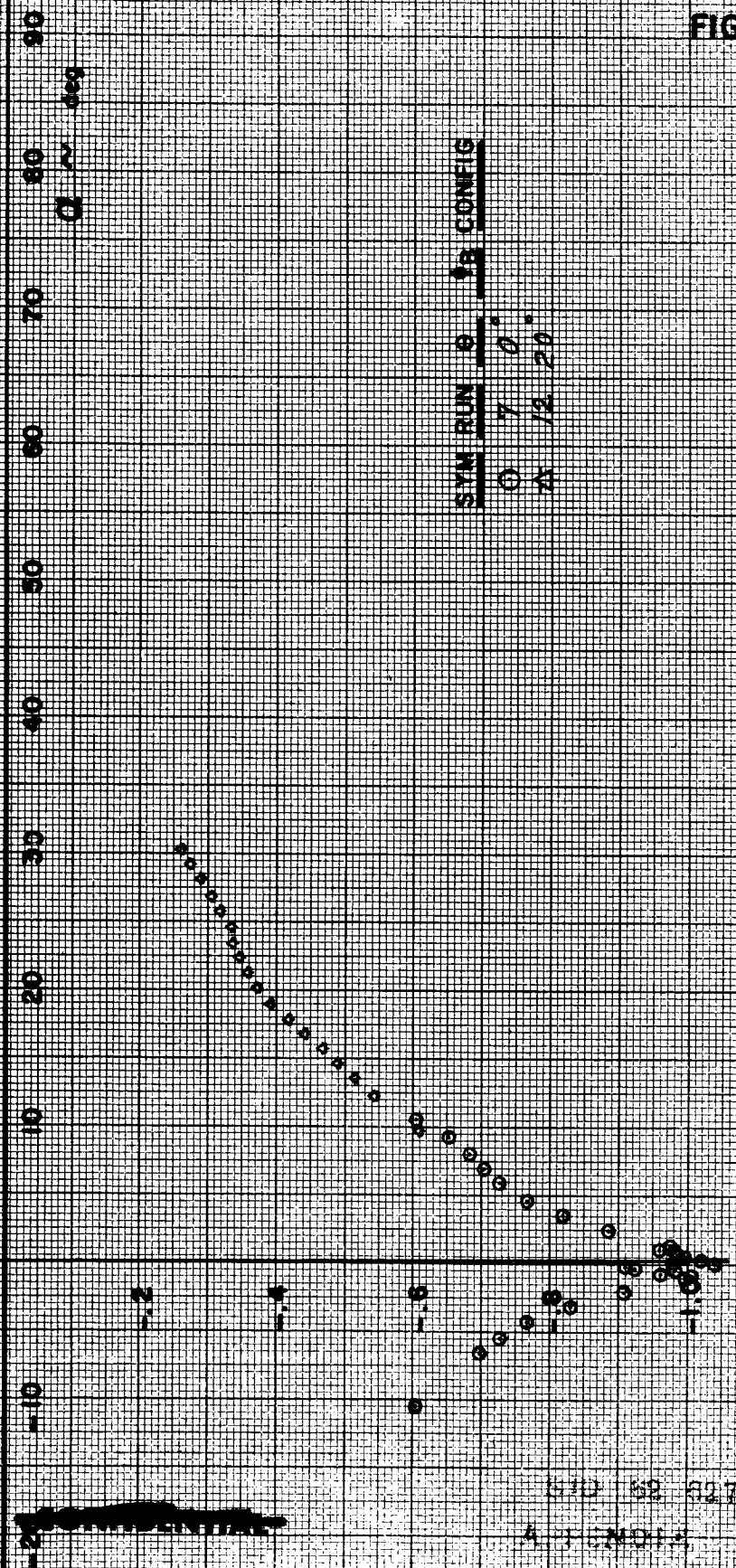
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FIG 2/F

 C_{m_A} vs θ

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 $\frac{X_{CP}}{D}$ E₂, E₄, C₂,
M-6733, 120° TOWER
ON - 4000' G

| | | |
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FIG 22 a

C_d vs Q

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

Co. w. C_d = 1.778 E₂ T₂ C₂ / A₂ 2 x 10⁶
 No. = 1/2778

120' TOWER

SYM RUN 98 COFFIG

| |
|------|
| 66.0 |
| 60.0 |
| 54.0 |
| 48.0 |



| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 $C_L \approx C$

E₂, J₂, C₂ TOWER
M₀ = 1.978 R_N = 1.62 V_{ICG}

C_L

30

20

10

0

-10

-20

-30

-40

-50

-60

-70

-80

-90

-100

-110

-120

-130

-140

-150

-160

-170

0

10

20

30

40

50

60

70

80

90

100

110

120

130

140

150

160

170

180

190

SIM RUN 9 - 15 config

0

20

40

60

80

100

120

140

160

180

200

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5 VU NAPPA

FIG 22 b

CL vs C

| | |
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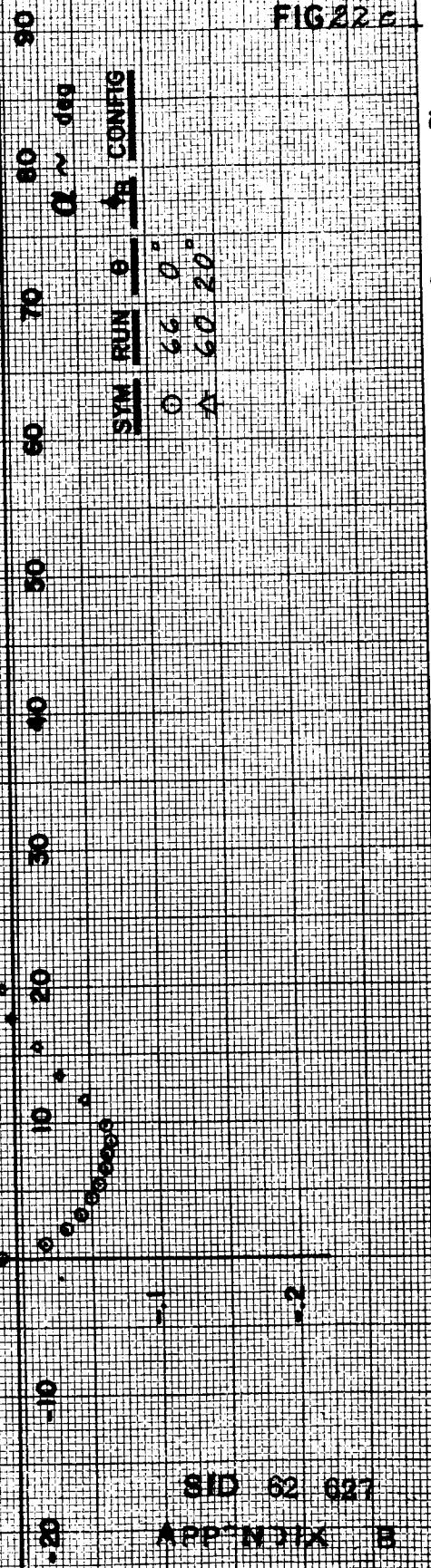
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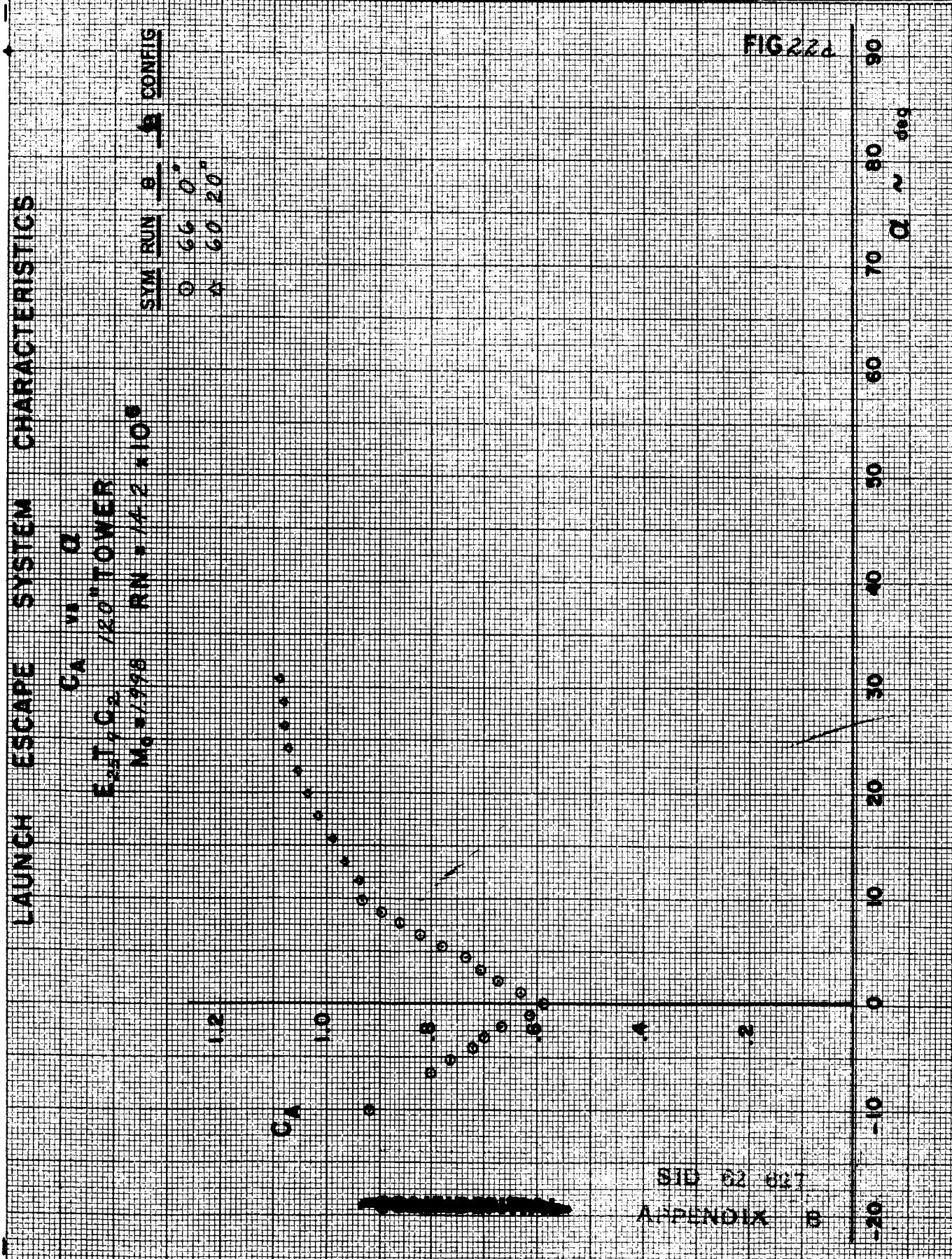
LAUNCH ESCAPE SYSTEM CHARACTERISTICS

Config. # C 12-1 OVER
E 13 T 4 C 2
M 6 • 7472 R 4 • 4 2 3106
• -3/55
• 4047



$C_{mca} vs \alpha$

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 C_N vs. α

F-2A TOWER /20' TOWER
M₀ = 1.7718 RN = 4.2 * 10⁸

 C_N

SYM RUN #3 CONFIG

○ 66 0°
X 60 20°

50 40 30 20 10 -10 -20
C_N 80 60 40 20 0 -20

S/D 52 527

APPENDIX B

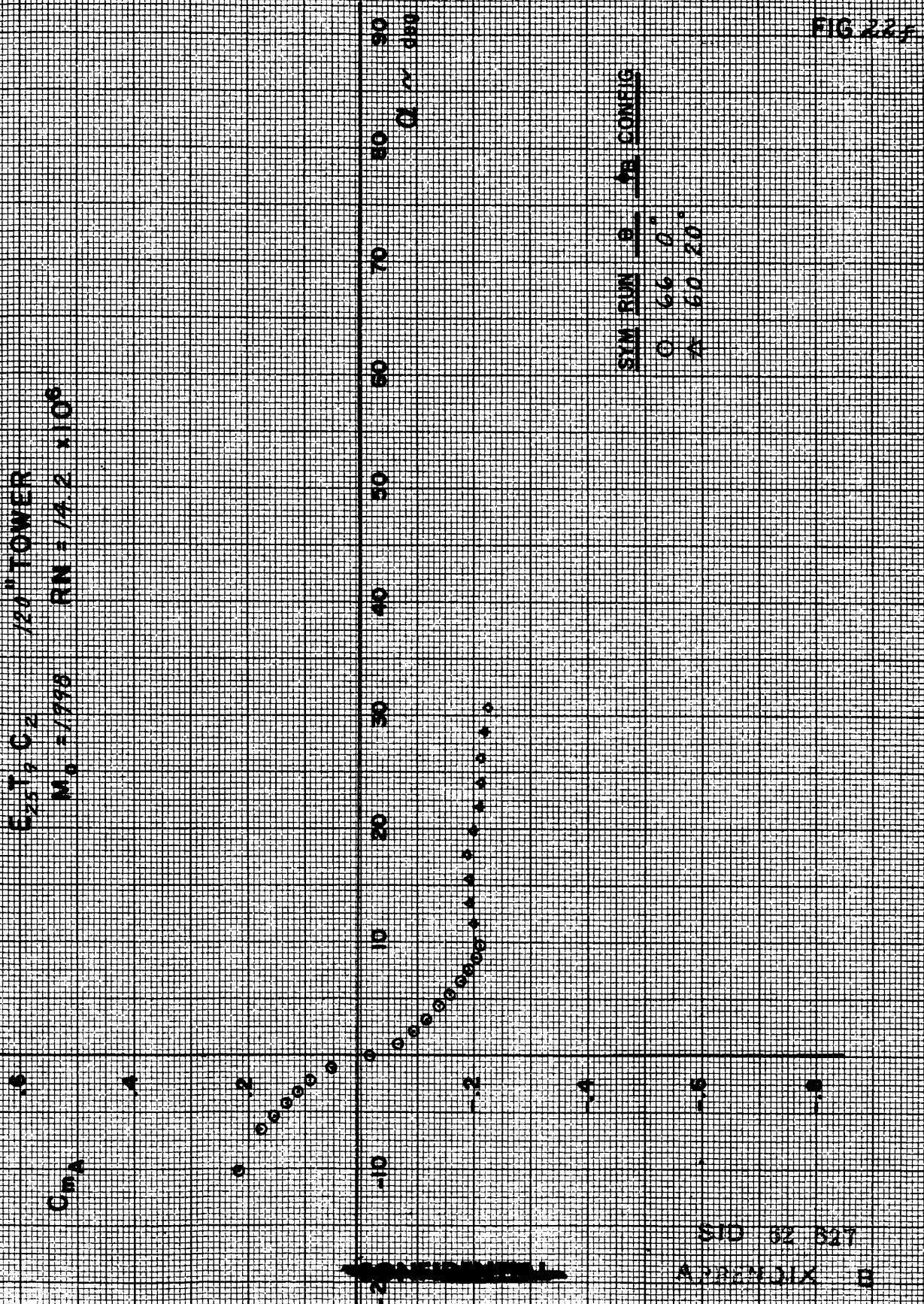
FIG. 22e

 C_N vs. α

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{m4} vs α
 E_2, T_2, G_2 / 20' TOWER
 $M_0 = 1/275$ RN = 14.2 * 10⁶

 C_{m4} vs α

| | |
|--------------|--|
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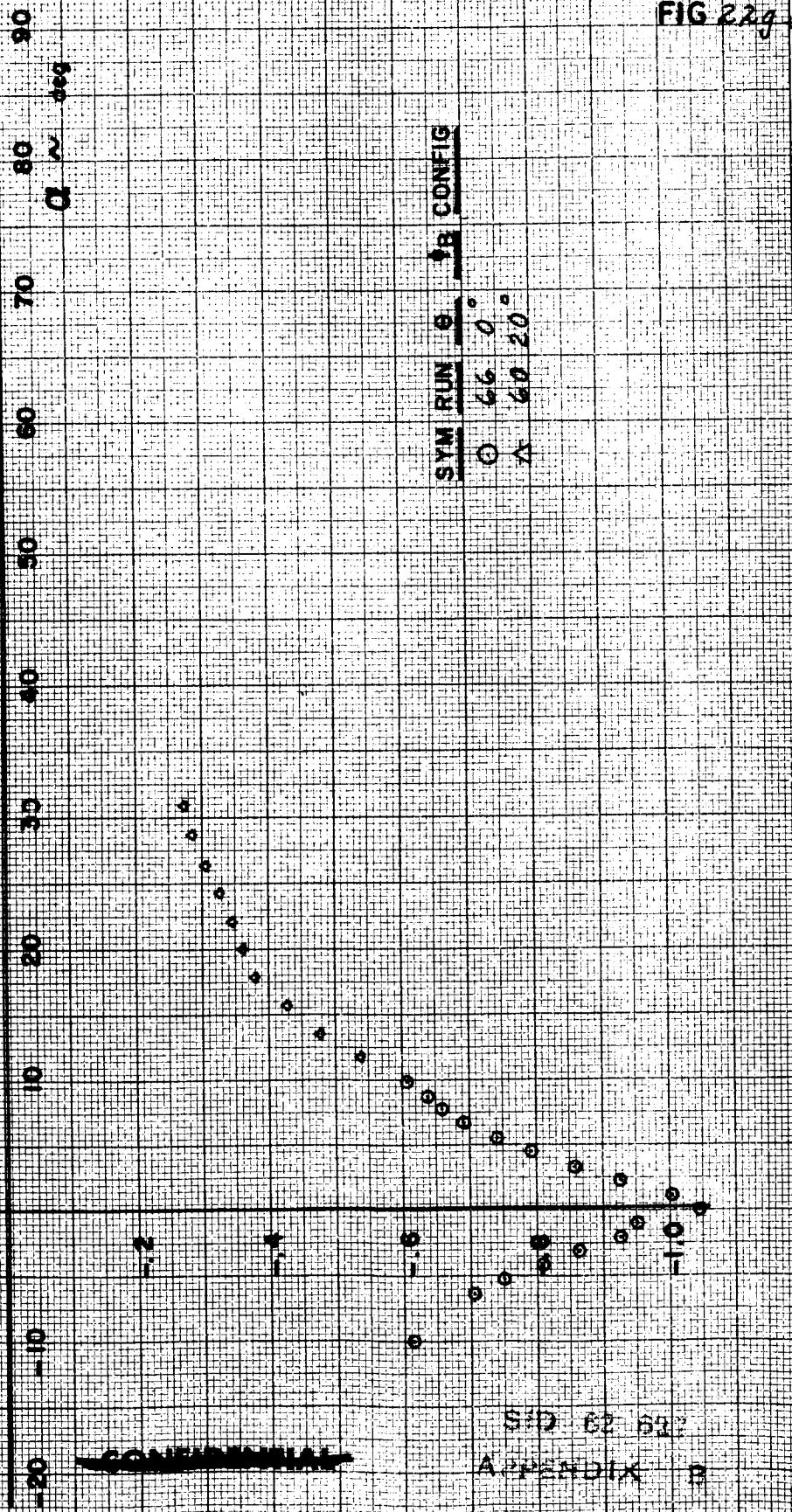
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$\frac{C_1}{D} \times C_2$ = 1.928 $R_N = 14.2 \times 10^6$ TOWER

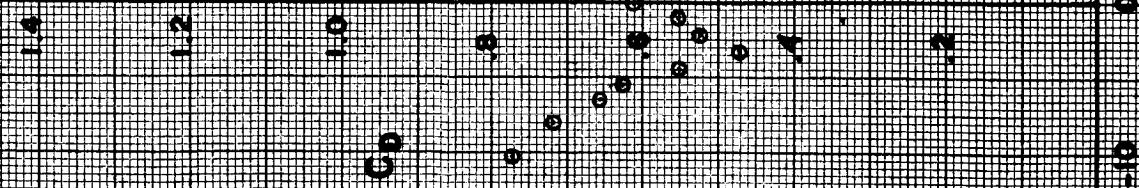
$\frac{X_{CP}}{D}$



$\frac{X_{CP}}{D} = \alpha$

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C₀ vs. QE₂T₂C₂/20' TOWER
M₀ = 0.7 R_N = 1/24 10⁶

SUMMARY OF TEST CONFIGURATIONS

| | | |
|---|-----|-----|
| Q | 2.2 | 0° |
| A | 3.8 | 20° |

FIG 222

8

C_D vs. Q

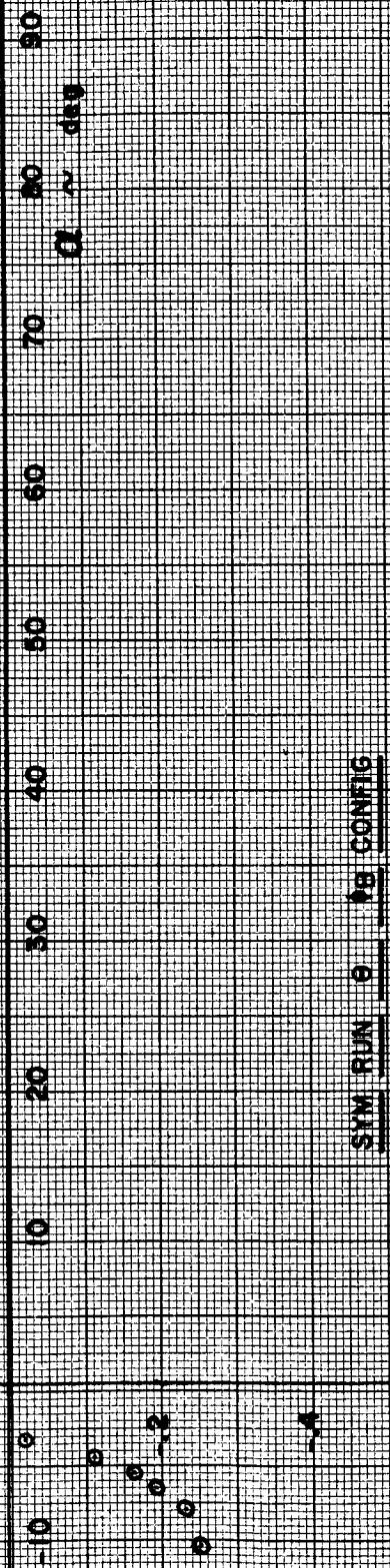
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$C_L = 0.2$ $C_d = 0.7$ $E_{22} = C_2 = 1/20$ " FLOOR
 $M_e = 0.7$ $R_N = 1/3.4$ $M_O = 1$

SYM ROLL α β CONFIG

- 22 0°
 38 20°

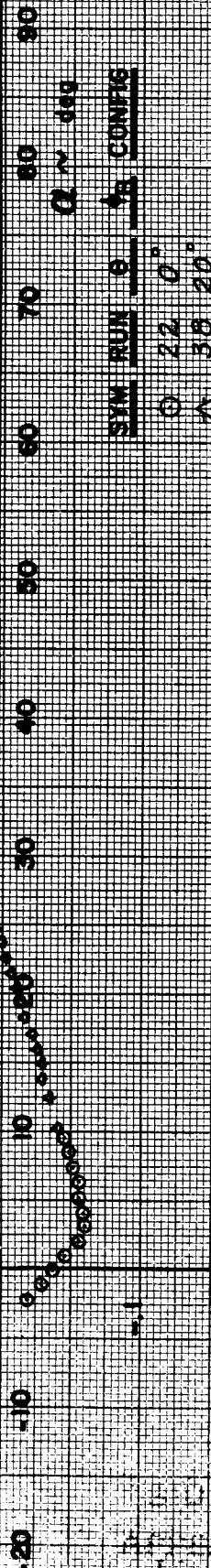
FIG 23b

CL vs alpha

| | | | |
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LAUNCH SYSTEM CHARACTERISTICS

SYSTEM NUMBER

C_m vs QEFT/C2 TOWER
RN 4/5/2 3061000
800
600
400
200
0C_m vs QC_m vs Q

0 20 40 60 80 100 120 140 160 180 200

KX ROLL 0 20 40 60 80 100 120 140 160 180 200

FIG 2.1c

C_m vs Q

| | |
|--------------|--|
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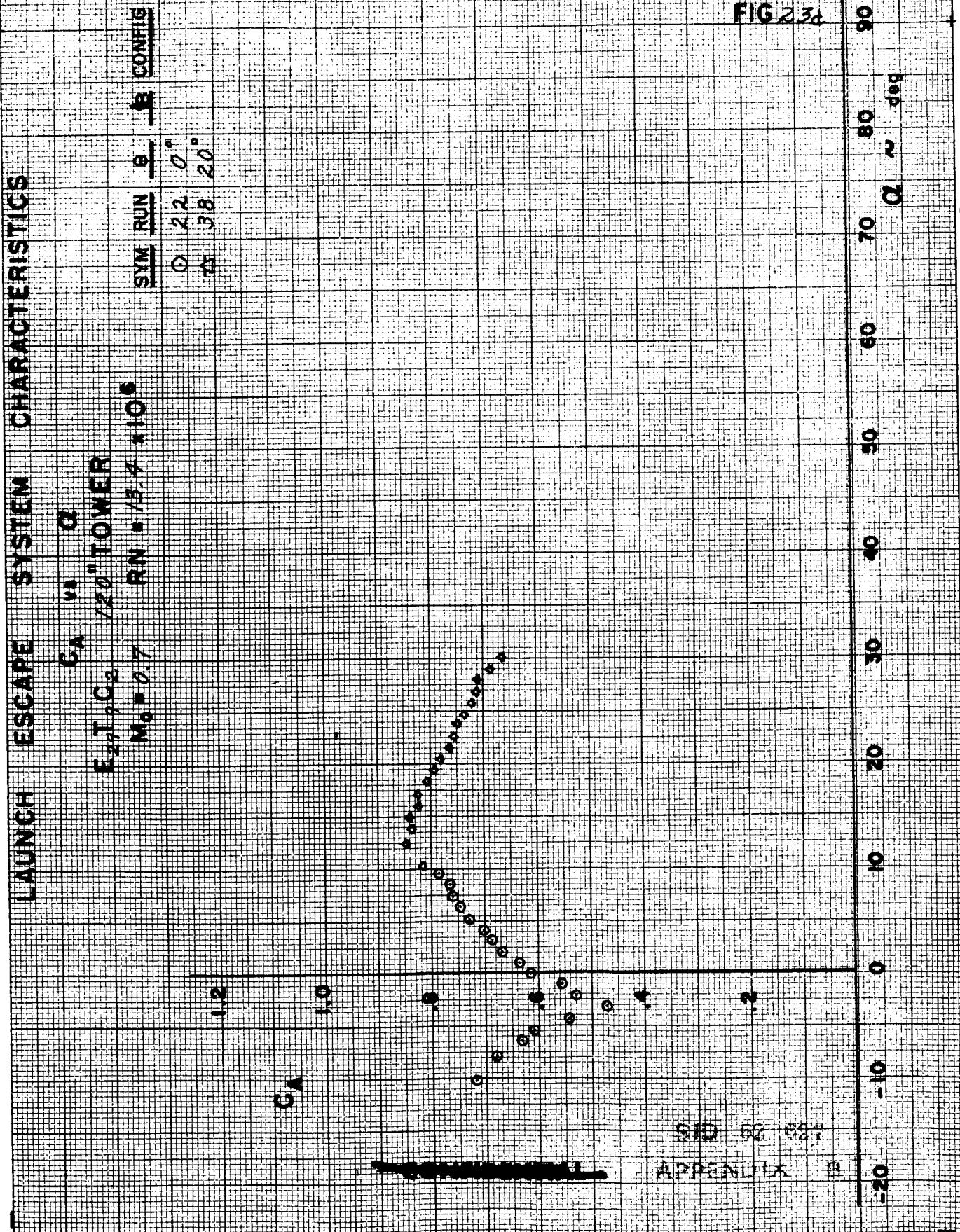
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FIG 23d

CA vs Q



| | | |
|--------------|----------------------------------------------------------------------------------------------------|------------|
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AVING'S ESCAPE SYSTEM CHARACTERISTICS

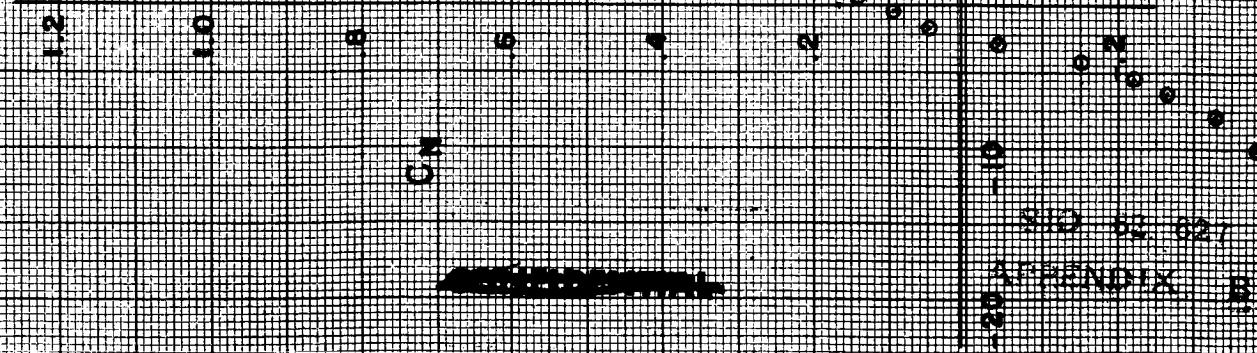
$C_N = 0.7$ $C_{A_T} = C_{A_D} = 1.0$ $R_N = 10^8$
 $M_0 = 0.7$ $\alpha = 0.7$ $\beta = 0.7$

SYM RUN θ • B CONFIG

O 22 0°
 A 38 20°

80
70
60
50
40
30
20
10
0

FIG 23-2

C_N vs. α 

| | | |
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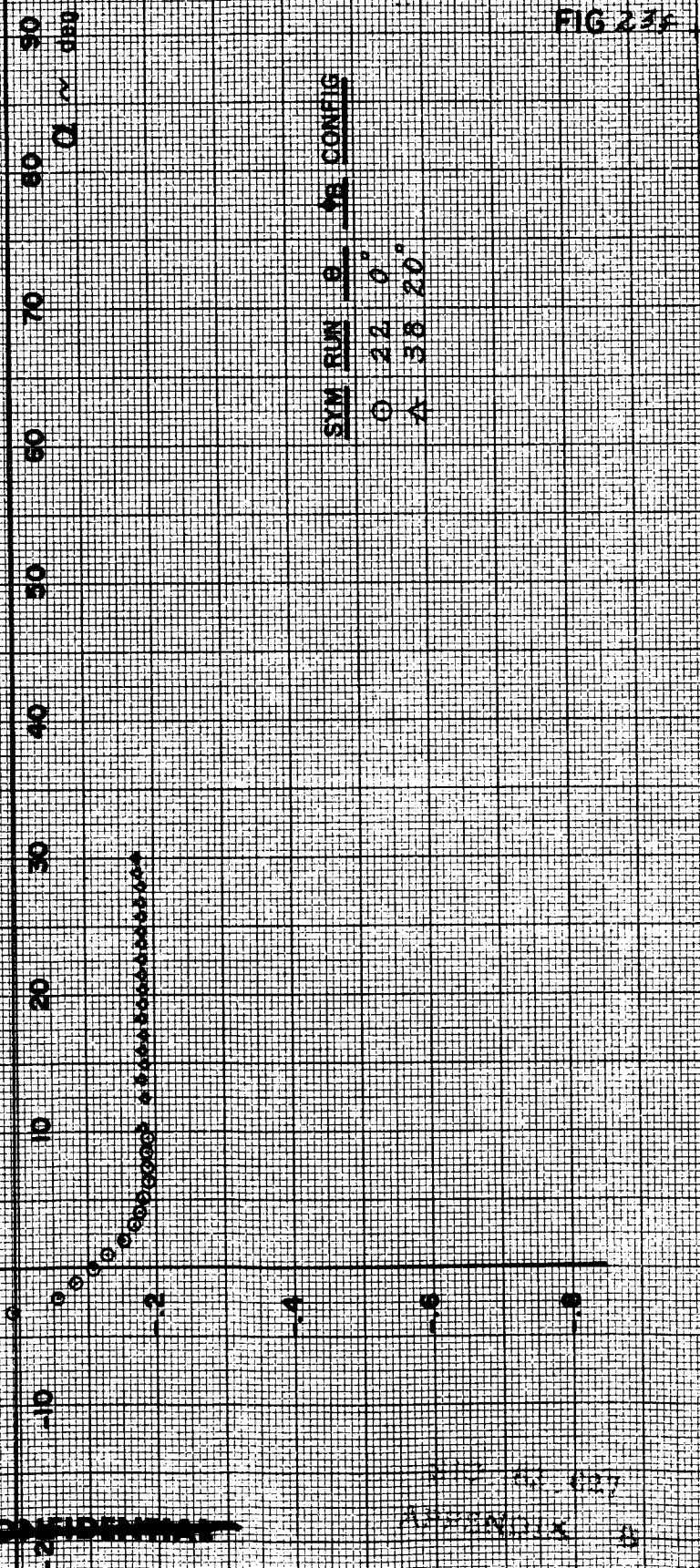
TWT 74

FIG 236

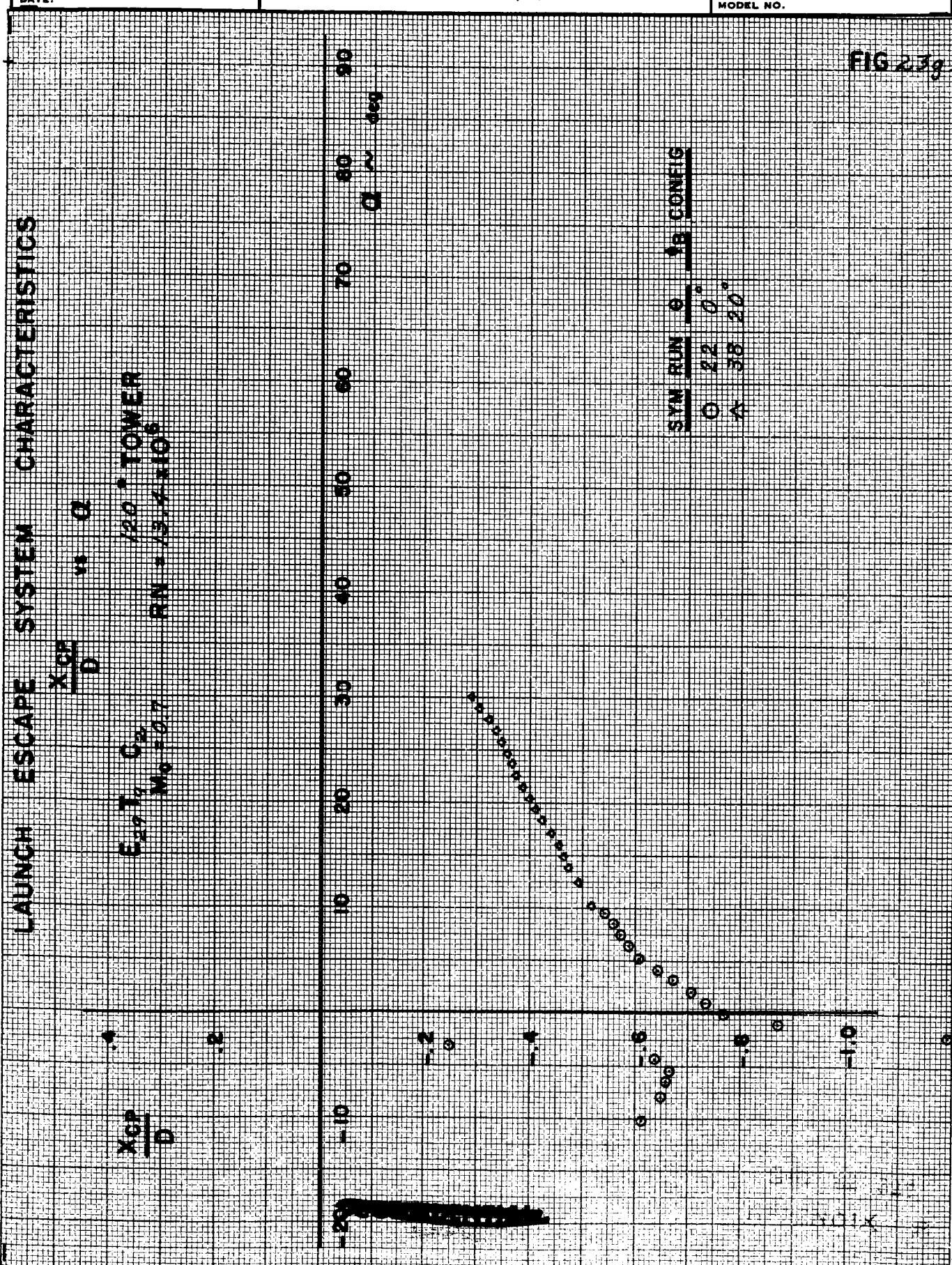
Cma vs a

AUXILIARY ESCAPE SYSTEM CHARACTERISTICS

C_{tra} = $C_1 + C_2 \cdot T_{\text{tower}}$
 $M_e = 0.7$ RN = $1/3 \cdot 4 \cdot 10^6$



| | | | |
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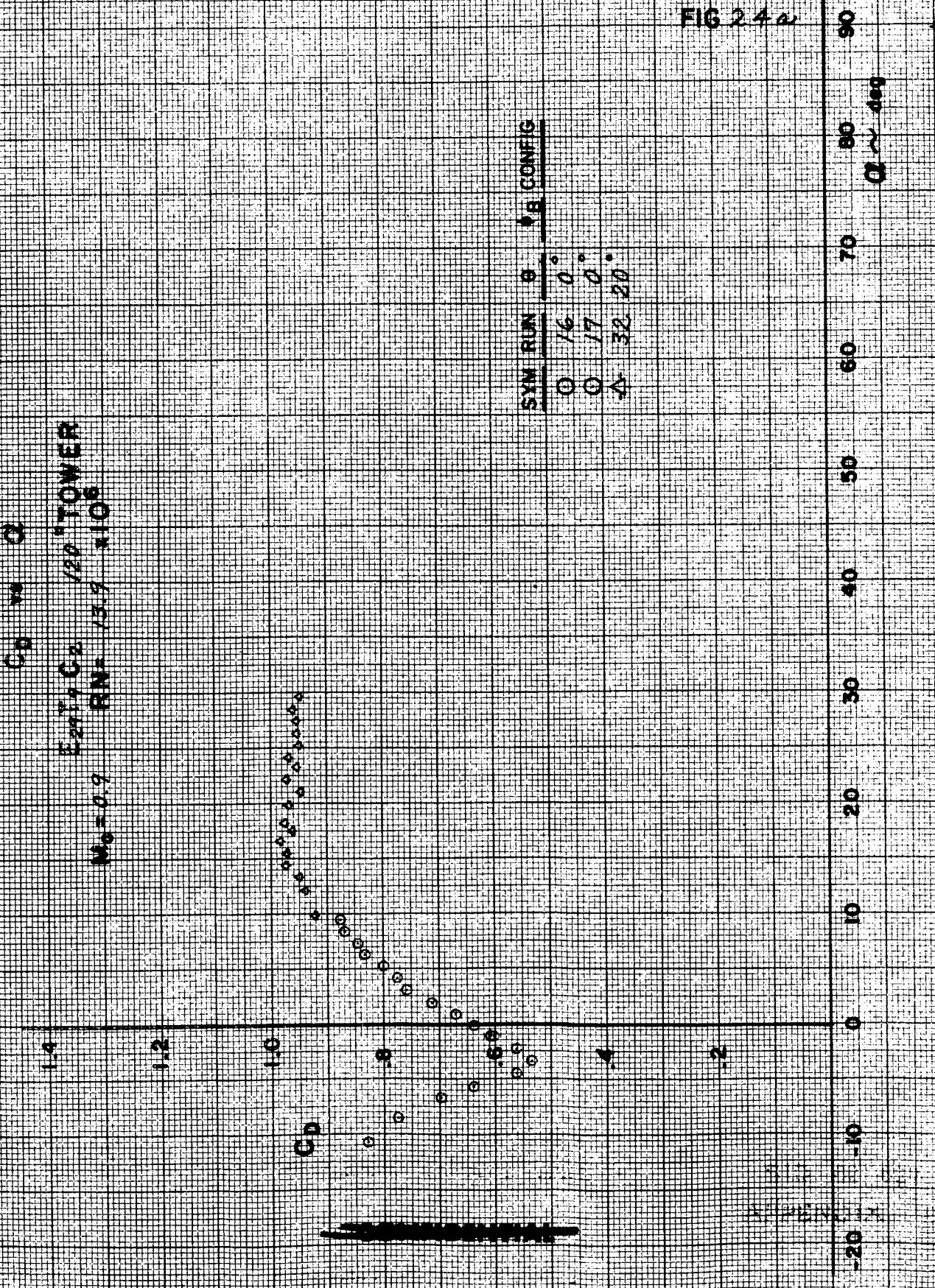
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FIG 244

CD vs Q

SYSTEM CHARACTERISTICS

229.7 Gz / 20° TOWER
 $M_0 = 0.2$
 QNa / 3.7 NLO



| | | |
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FIG 24a

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 $C_L \propto \alpha$

E₂₂₇T₂C₂
100' TOWER
RN = 1/2 g, 30°

 C_L

SIN SIN 0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

-10 -8 -6 -4 -2 0 +2 +4 +6 +8 +10

0

80

70

60

50

40

30

20

10

0

-10

-20

-30

-40

-50

SIN SIN 0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

SIN SIN 0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

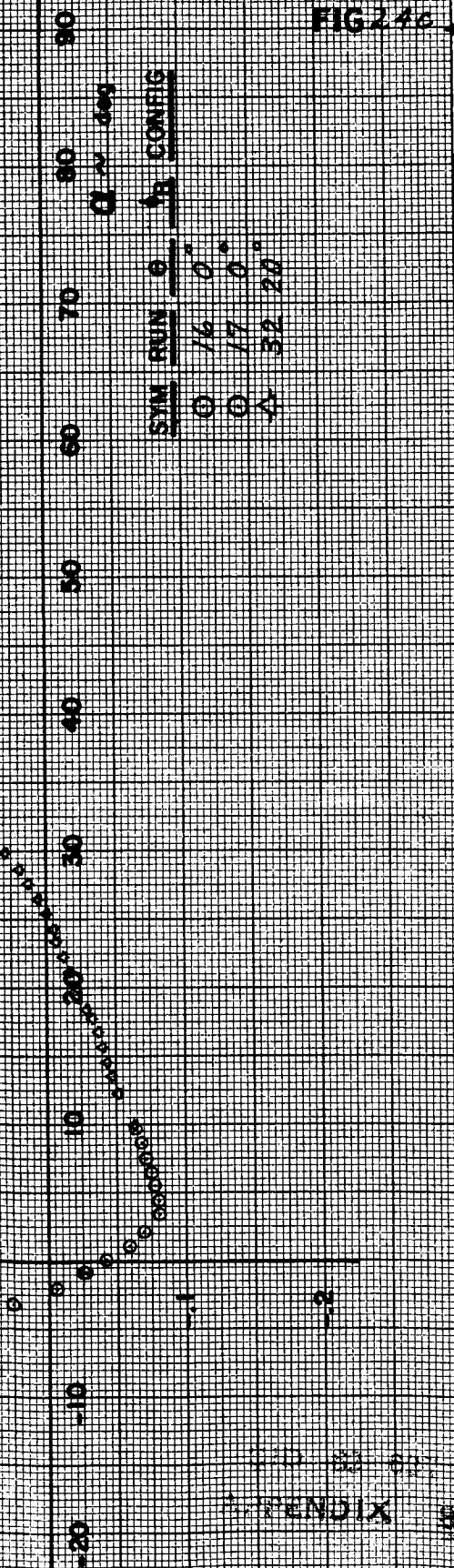
SIN SIN 0° 12° 24° 36° 48° 60° 72° 84° 96° 108° 120°

CL vs Q

| | | | |
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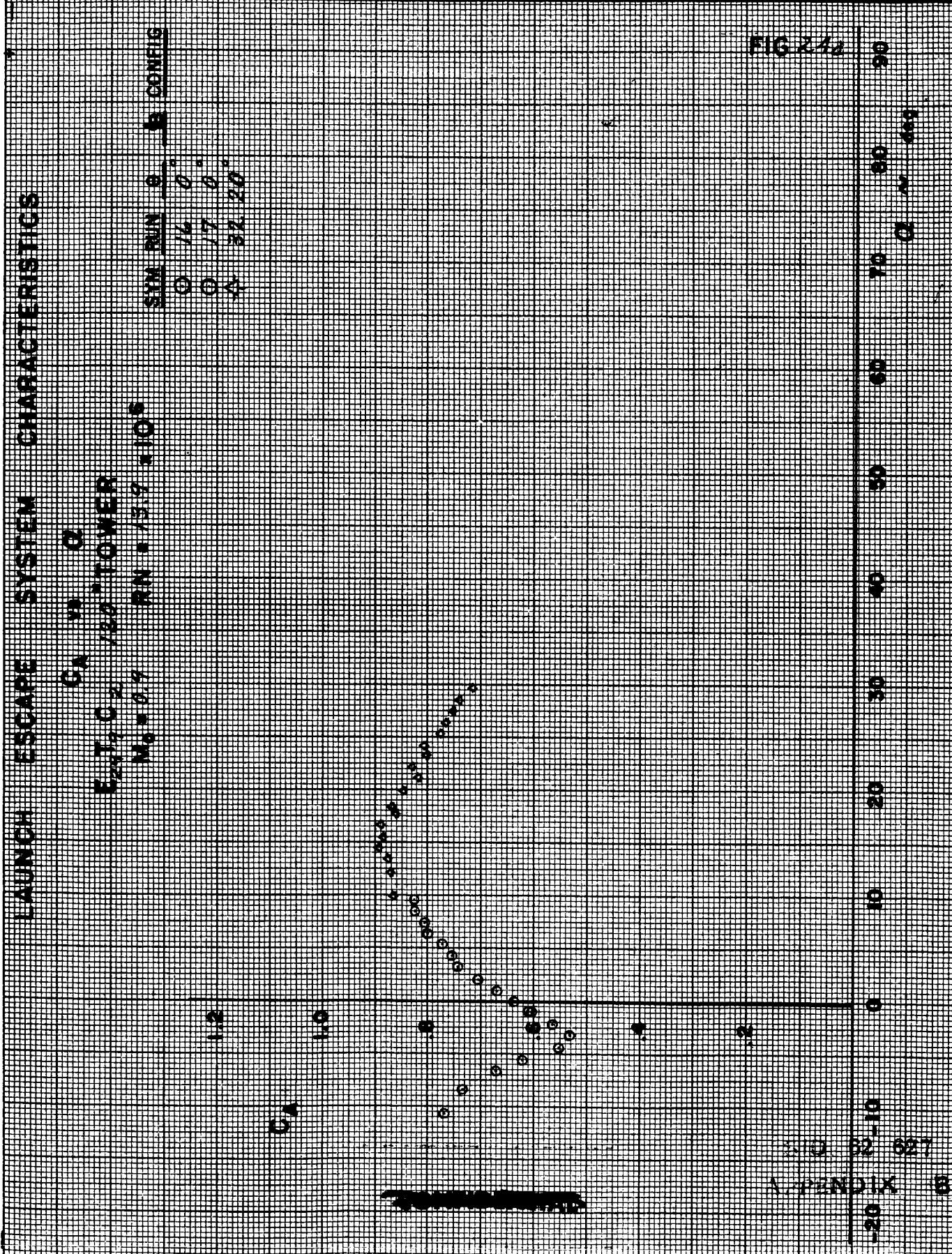
AIRCRAFT SYSTEM CHARACTERISTICS

Chm. C₁ C₂ C₃ C₄ C₅ C₆ C₇ C₈ C₉ C₁₀
 1/20° TOVER
 RM = 13.4 SIC
 No = 0.9
 -34.75
 0.77
 0.00



Cmcg vs Q

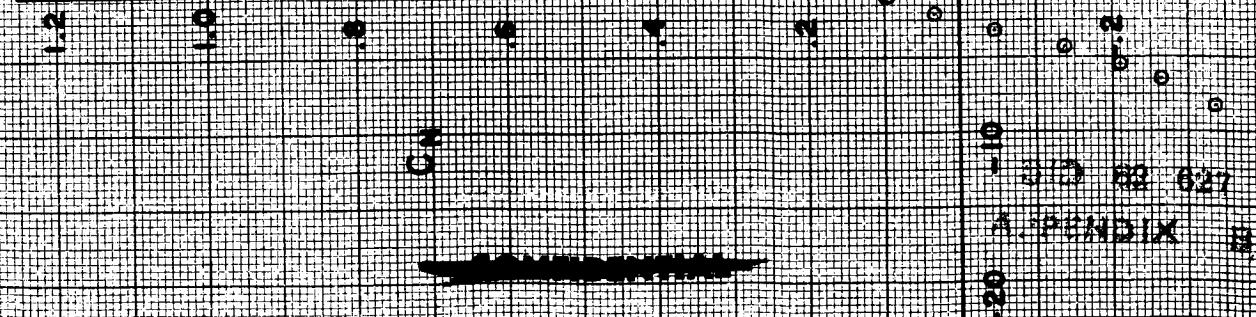
| | | | |
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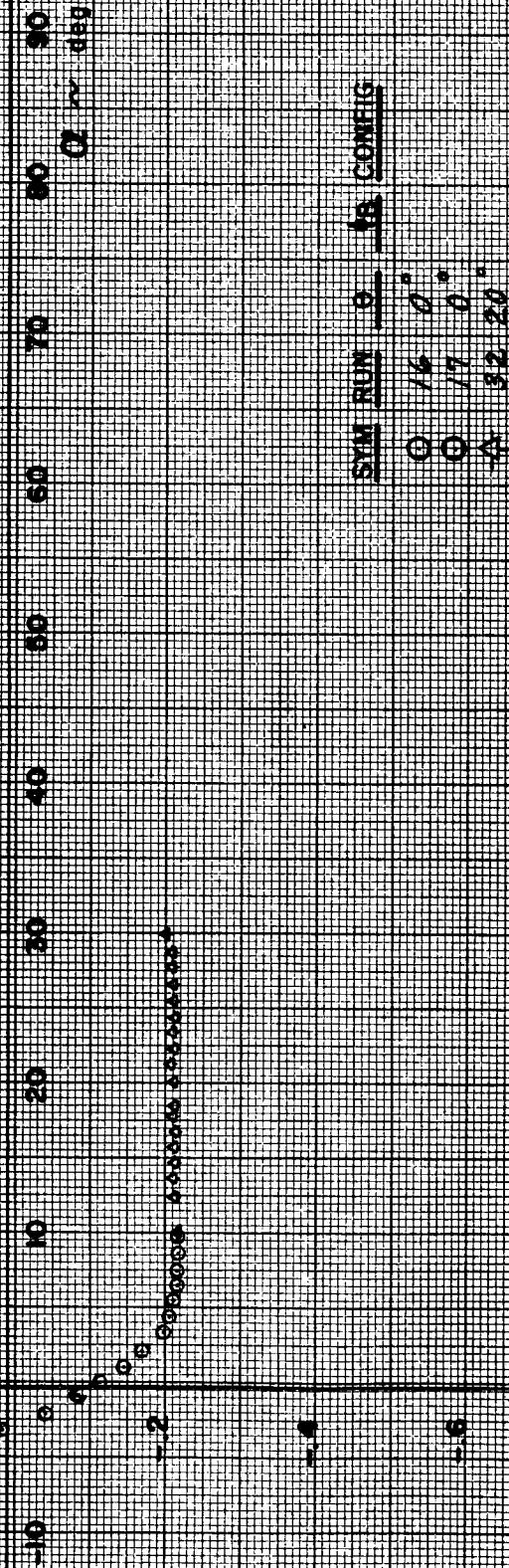
LAUNCH SYSTEM CHARACTERISTICS

$E_2/T_1 = C_2 = 420$, $C_1 = 2$, $R_N = 3.7 \times 10^6$
 $M_\infty = 0.7$



| | | |
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LAUNCH ESCAPE SYSTEM CHARGE TESTS

 C_{mA} vs Q
 $E_2 = 7.2 \text{ C}_2 = 12.0^{\circ}$ TOWER
 $M_0 = 0.9$ $RN = 13.7 \times 10^8$
 C_{mA} 

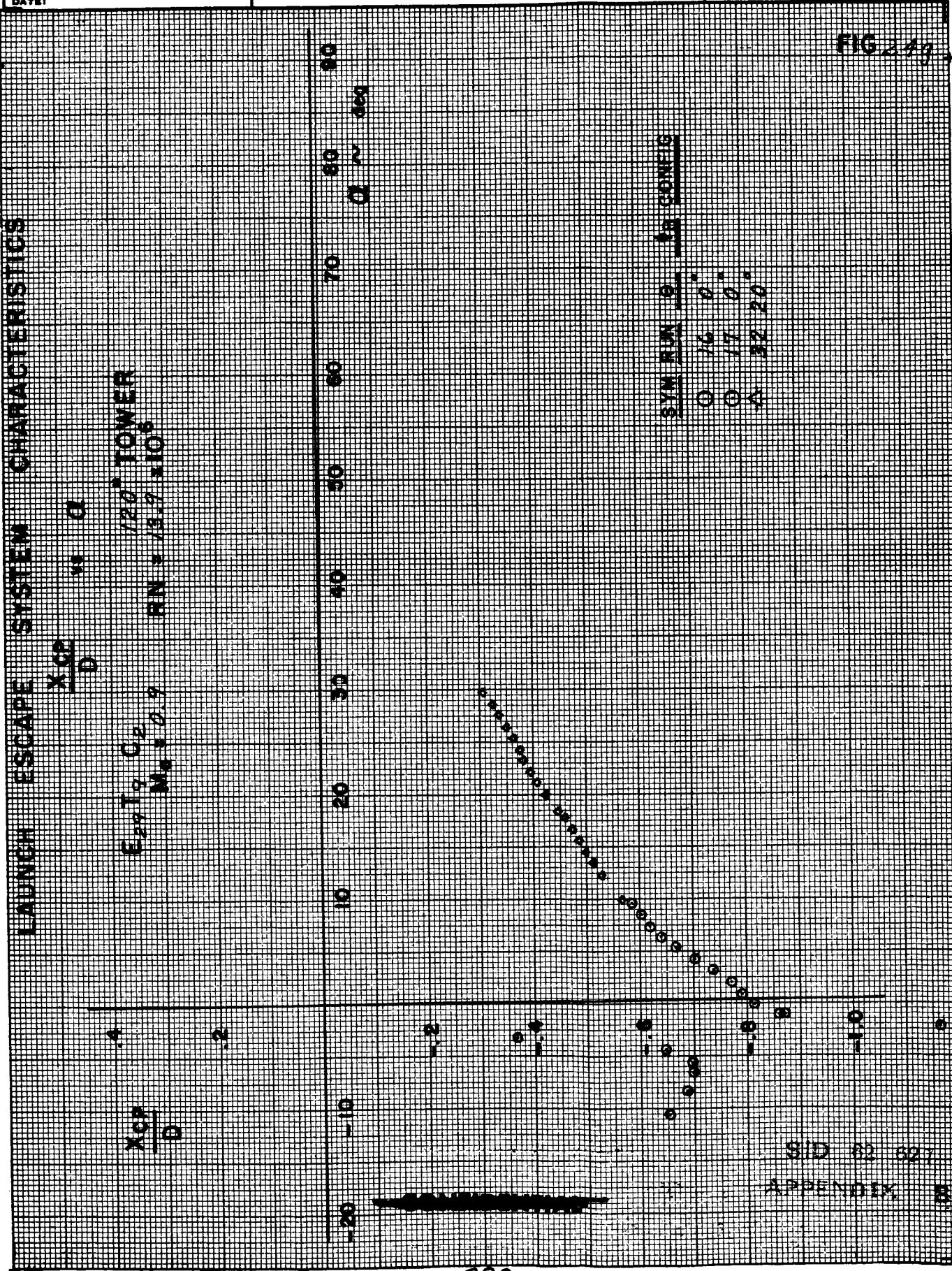
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FIG 2A

APPENDIX

S/D 62 627

| | | |
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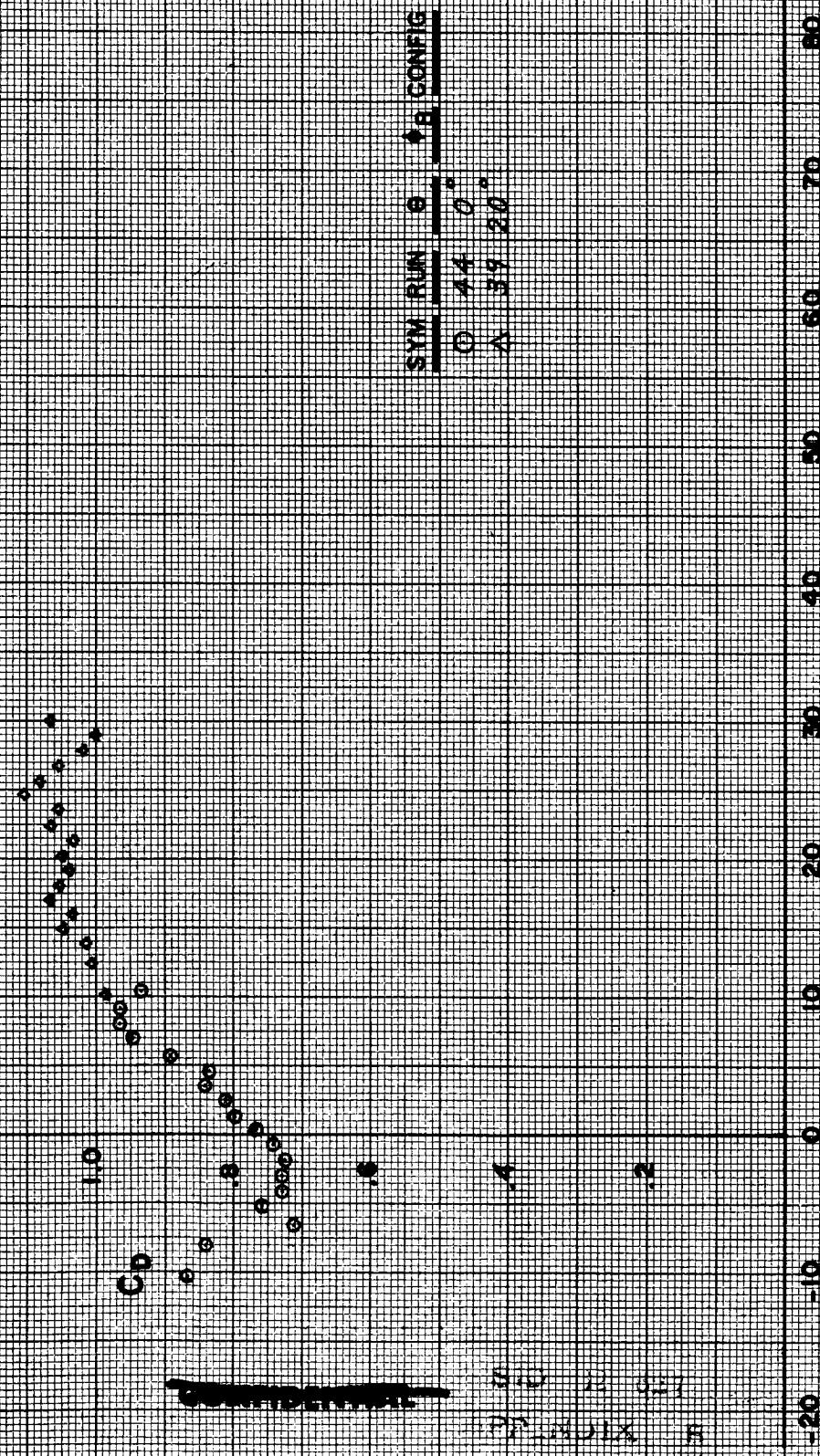
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FIG 252

C_D vs Q

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

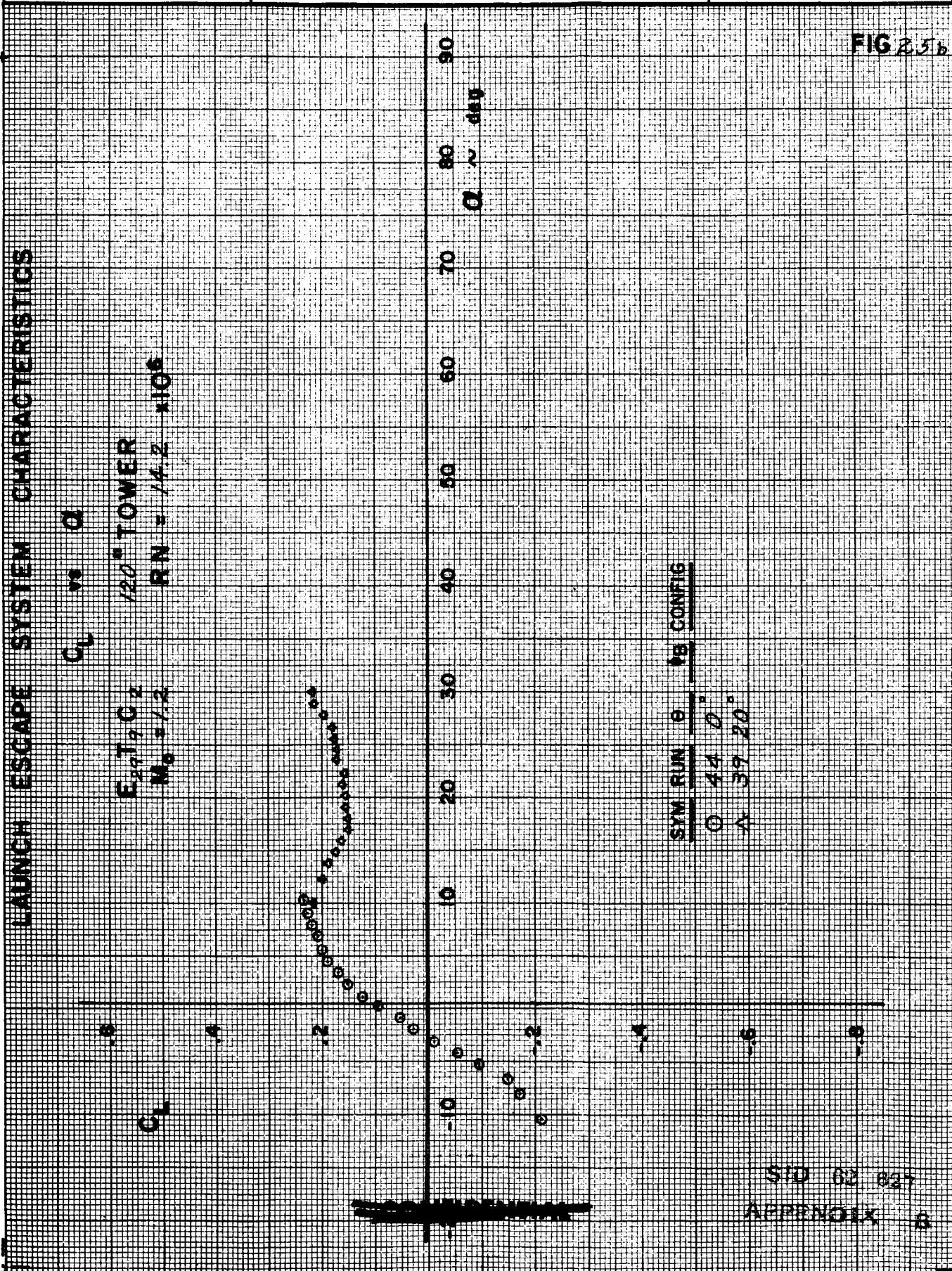
$C_0 = 1.2$ $E = T_0 C_2$ $R_N = 1/4$ $z = 0.6$ TOWER
 $M = 2.12$



| | | | |
|--------------|----------------------------------------------------------------------------------------------------|------------|----|
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_L vs α
 E_{LT}, C_2
 $M = 1/2$
 120° TOWER
 SN = 342-106



S.D. 63 627

APPENDIX B

| | |
|--------------|--|
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SPACE and INFORMATION SYSTEMS DIVISION~~SECRET DEFENSE INFORMATION~~

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TWT 74

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E₂T₂C₂ 1/20 TOWER
 No. 1/2 RN 142 3105
 1/20-31/55 114-024

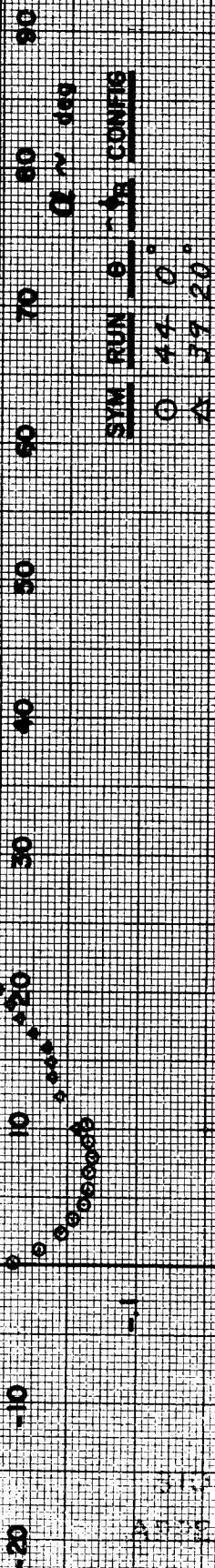
C_{ncg}

FIG 2.5c

C_{ncg} vs Q

| | | |
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FIG 25d

80

80

80

80

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80

CA vs Q

LAUNCH CHARACTERISTICS

SYSTEM

LAUNCH

CA vs Q
1/2 TOWER
M. 1/2 RN 1/4 2 4 10

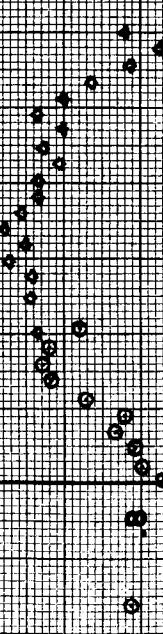
SYM RUN - 8 - 4 CONTS

O 14 0°
A 39 20°

CA

1.2

1.0



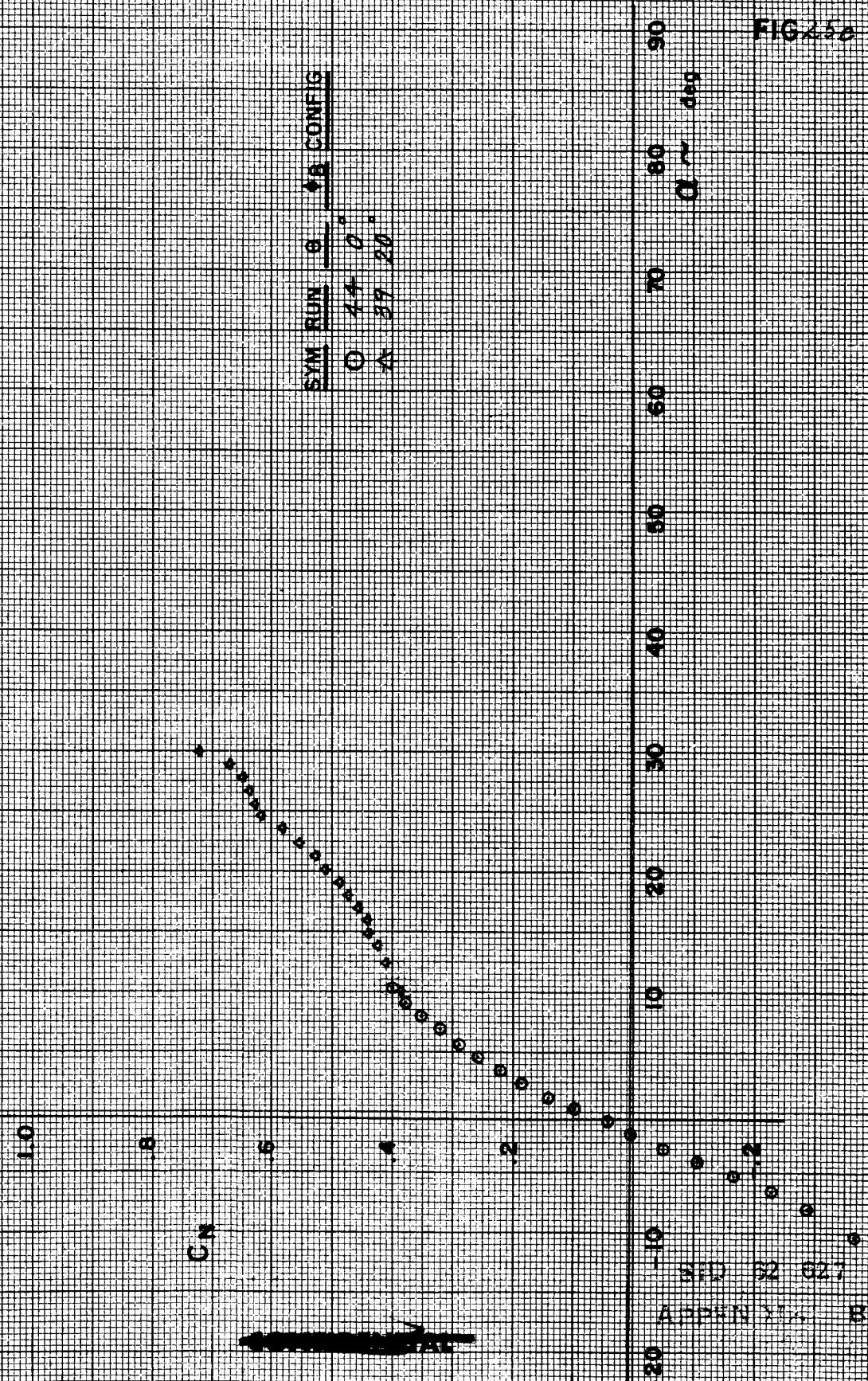
SIC 62 627

APPENDIX E

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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

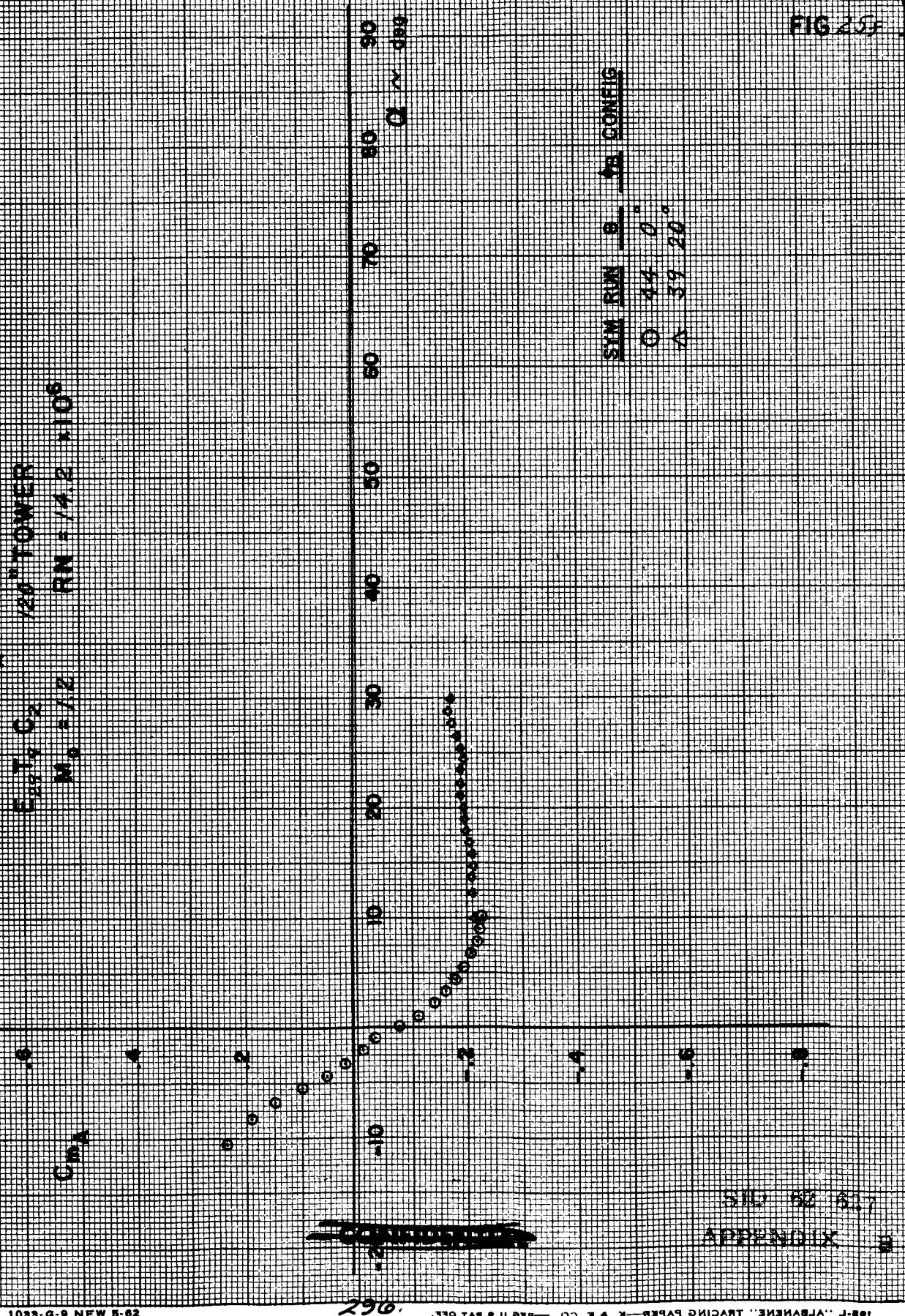
$E_{22} T_4 C_2 / 20 \times 10^5$
 $M_0 = 1.2 \quad R_N = 142 \times 10^5$



| | | | |
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LAUNCHES - ESCAPE SYSTEM CHARACTERISTICS

$C_{nA} = 0.0$ $C_{nR} = 0.0$ $C_2 = 0.0$ $R_N = 1/4.2 \times 10^6$



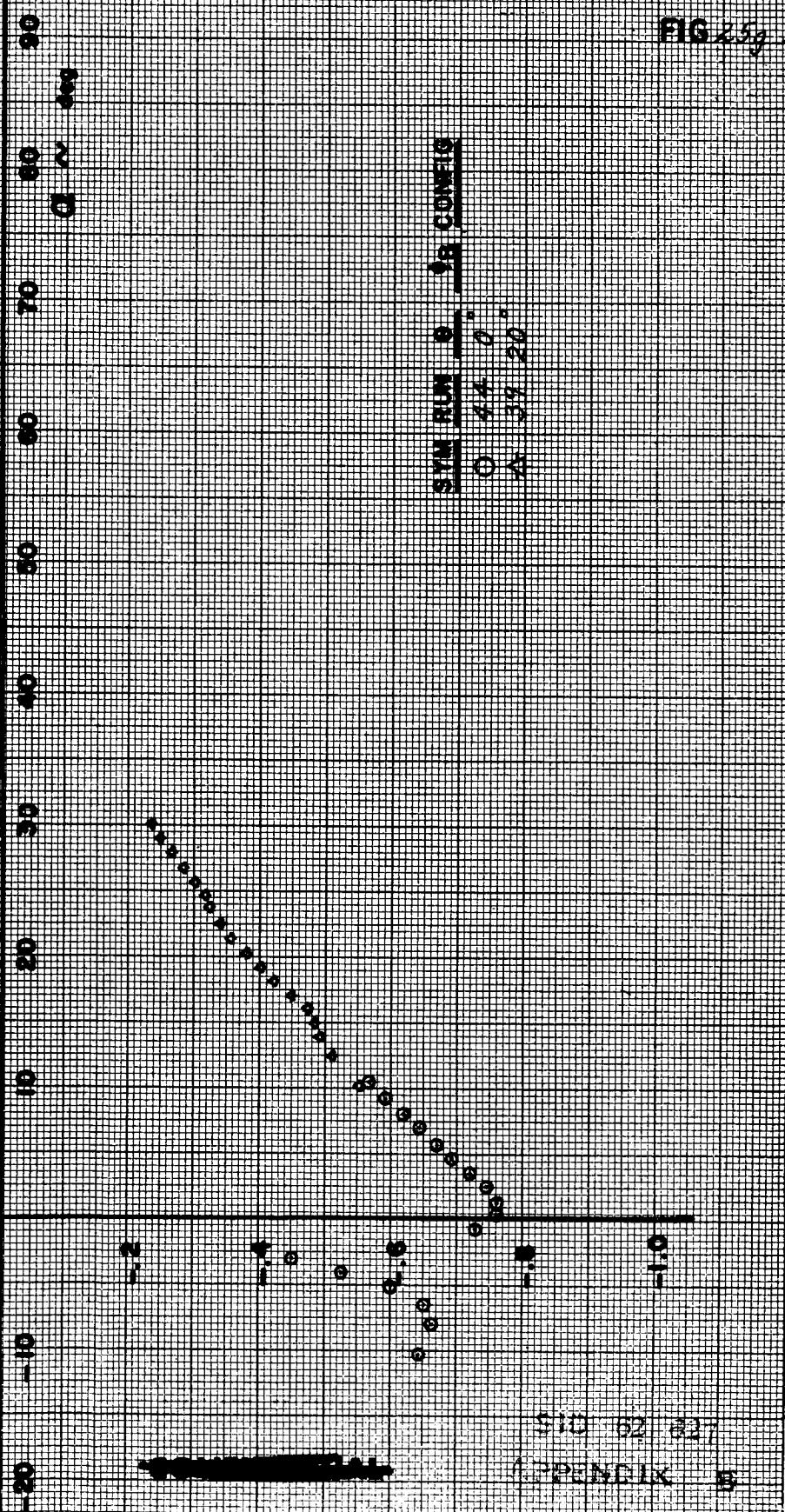
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$\frac{X_{CP}}{D}$ vs $\frac{Q}{D}$
 E_2, T_2, C_2
 $N_0, \sqrt{A_2} \cdot V_{IC}$
 $\sqrt{D} \cdot TOWER$



| | | | |
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FIG 2.6a

New 8

Note: Cf Diagram 15 AERONAUTIC Bureau

S10 62 62%

APPENDIX E

0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
300
320
340
360
380
400
420
440
460
480
500
520
540
560
580
600
620
640
660
680
700
720
740
760
780
800
820
840
860
880
900
920
940
960
980
1000

C_D vs α

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_D vs αC_D = 1.53 C_A / 4.2 X 10⁻⁶

1.2

C_D vs

298

| | | |
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FIG 26b

 C_L vs α

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

$EAT_2 C_2$ 120° TOWER
 $M_0 = 4.53$ $R_N = 14.2$ $W_N = 106$

 C_L C_L

* * * * *

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

* * * * *

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

SIM. ROLL ϕ 15 CONF.

0 5 10

0 5 10

4 13 20

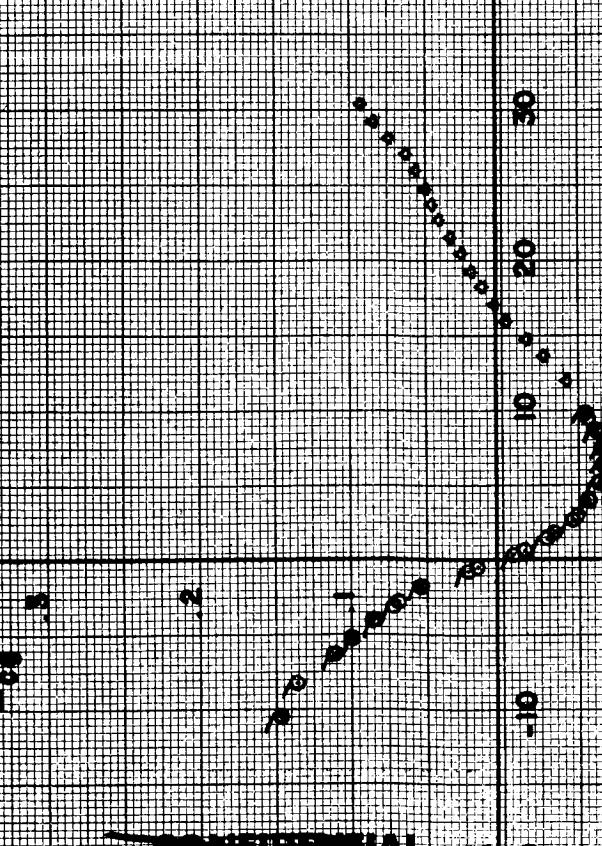
Note: G-Band has been run off 34000 ft

SID 62 G

APPENDIX G

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

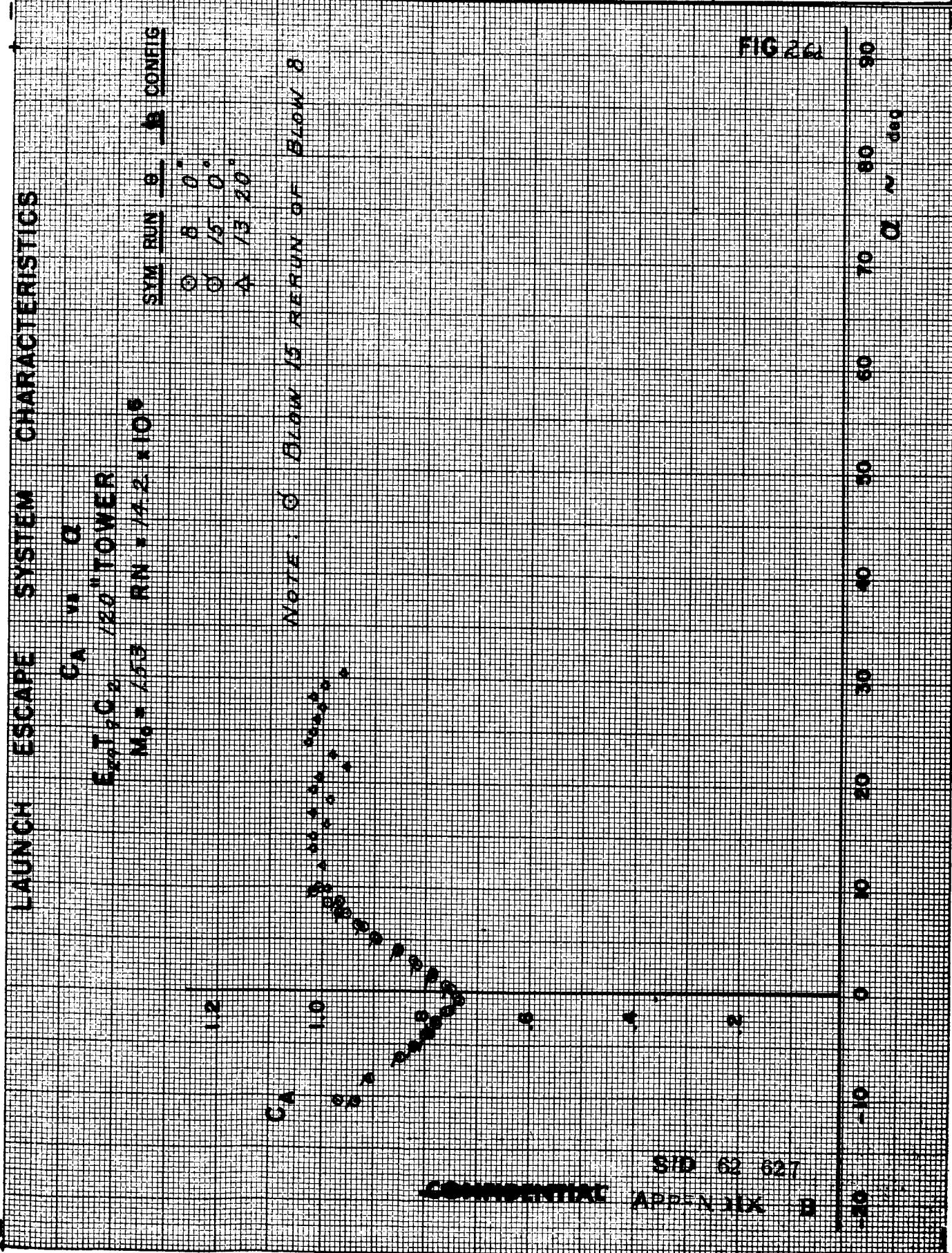
C_{meg} vs CE₂₇, C₂ /20° TOWER
M₂ = 1.53 Q₂ = 0.91 • 7.2 RICSM₂ = 1.53 Q₂ = 0.91 • 7.2 RICS
M₂ = 1.53 Q₂ = 0.91 • 7.2 RICSC_{meg}

| SIM RUN | 90° | 45° | 0° | -45° | -90° |
|---------|-----|-----|----|------|------|
| ① | 8 | 0 | 0 | 0 | 0 |
| ② | 5 | 0 | 0 | 0 | 0 |
| ③ | 4 | 13 | 20 | 0 | 0 |

FIG 26c
NOTE: ① DOWNSIDE REAR
② OF BLOW 6

S13 S12 S27
APPENDIX BC_{meg} vs C

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

F2A-1 C2/20-STOWER
V₀ = 7.53 R_N = 42.4108

1.2

1.0

C_N

302

1033-G-10 NEW 5-62 1033-P "VALBENNEE" TRACING PAPER-K. & E. CO., -500 U.S.PAT.OFF.

SYM BUN 8 4 1a CONFIG

CC 9 0°
CC 45 0°
A 8 20°

BLOCK 8
BLOCK 15 25000 ft

NOTE: G

20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

SID 02 027
APPENDIX E

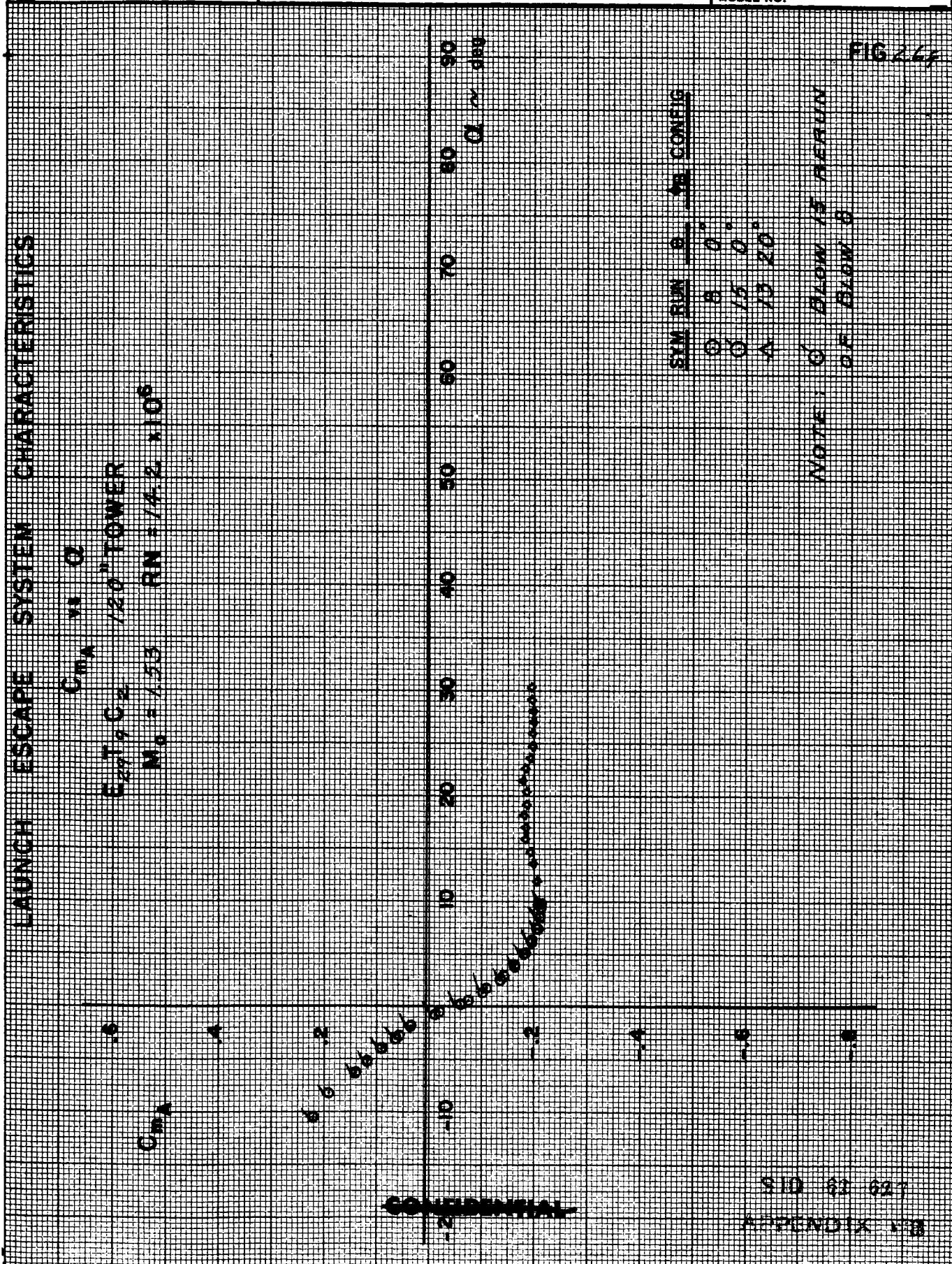
FIG 24e

C_N vs. Q

| | | |
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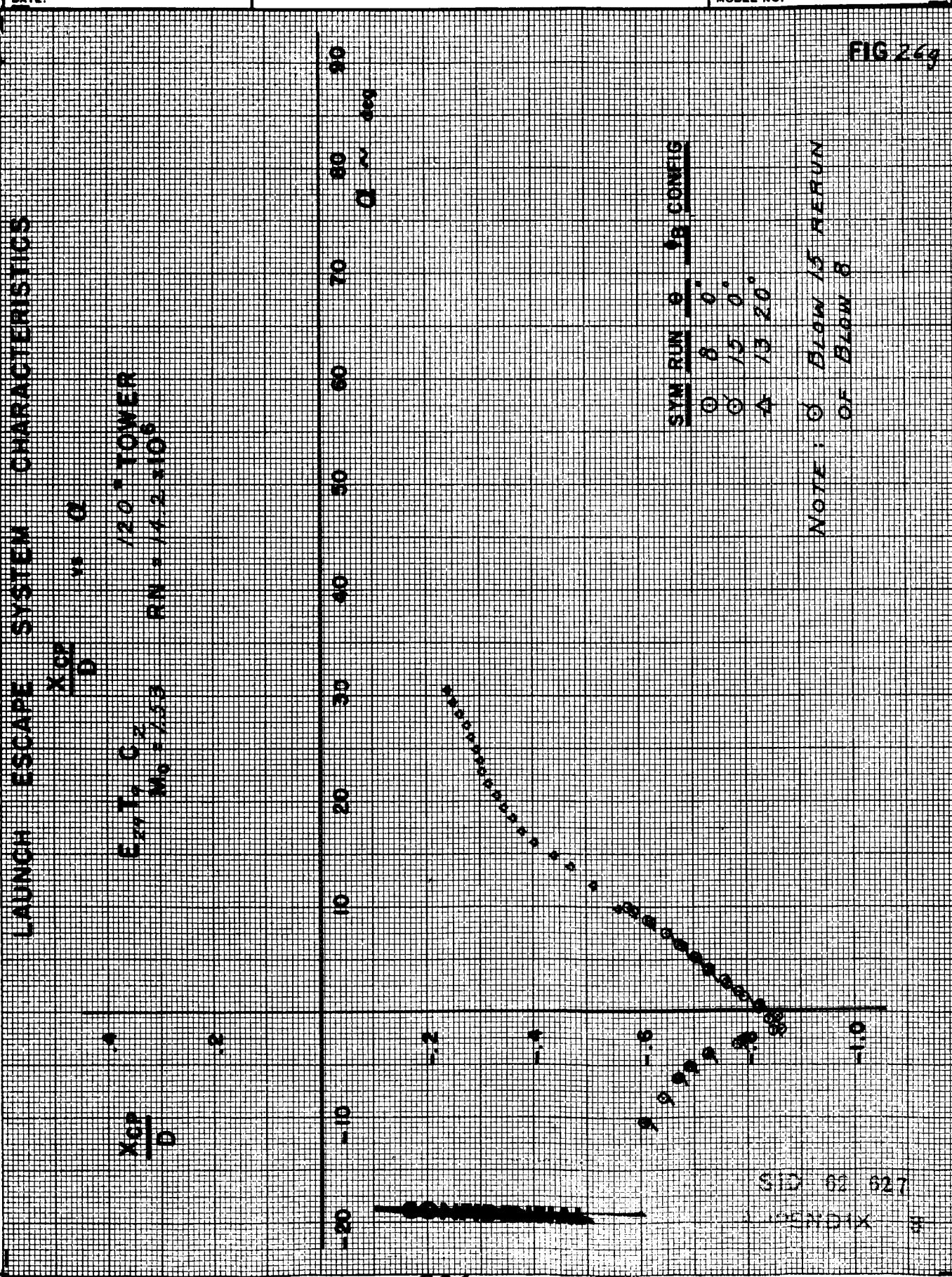
LAUNCH SYSTEM CHARACTERISTICS

Crnk. vs. Q
EFF. C. = 120° TOWER
M. = 1.33 R. = 14.2 x 10⁶



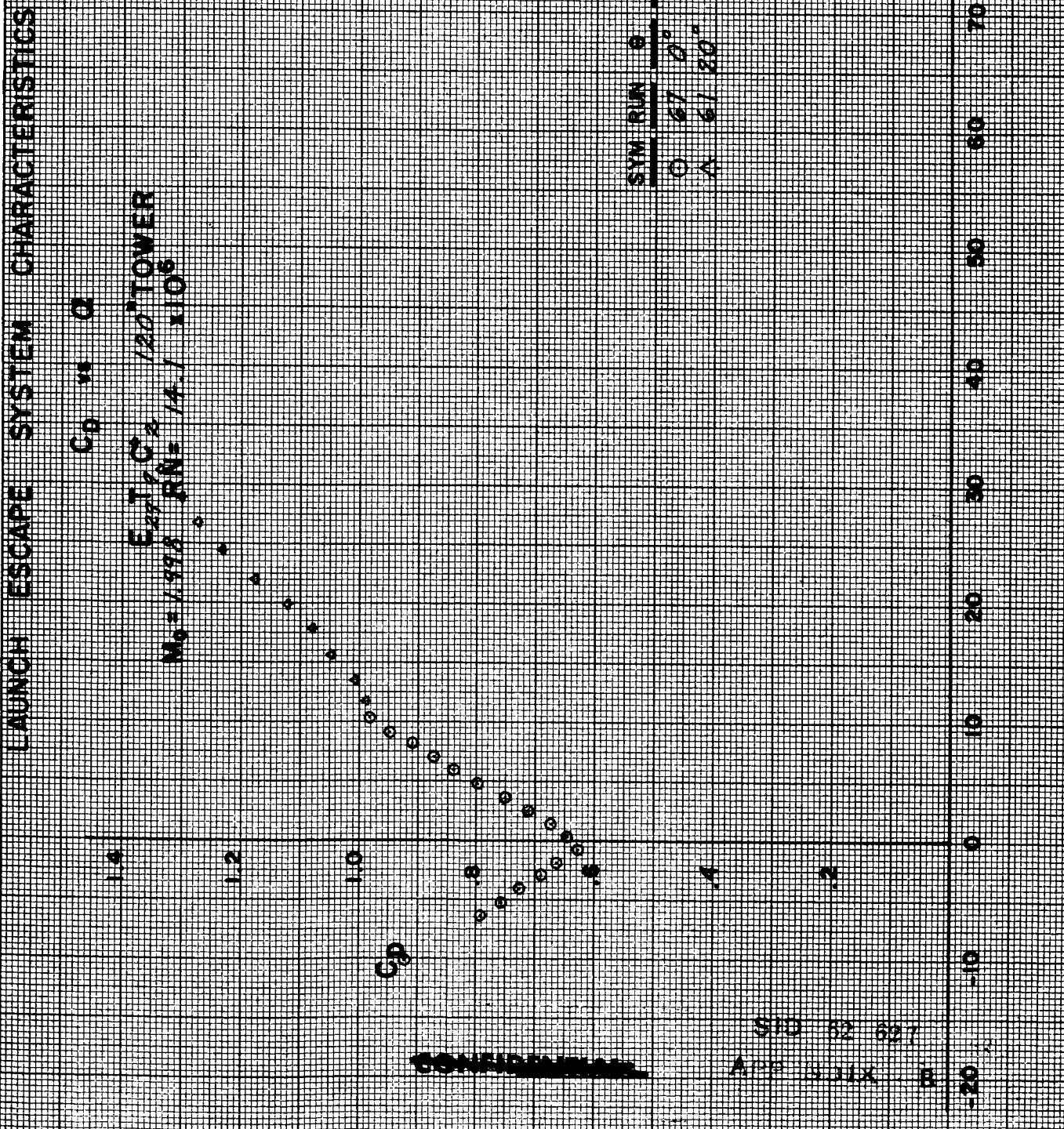
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS



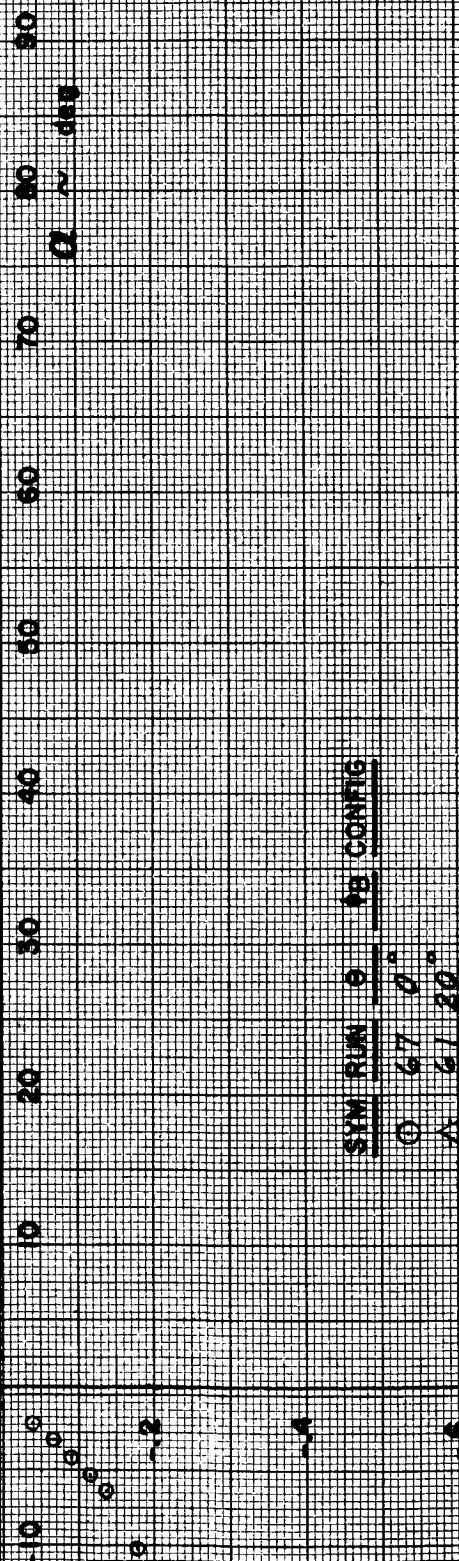
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FIG 2.1a

C_D vs. Q

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_L vs QEAT, C-4225 TOWER
W₀ = 6276 Q₀ = 1/4.1 V₀ =

| SYM | MIN | MAX | CONF |
|-----|-----|-----|------|
| Q | 0 | 10 | 20° |
| Q | 10 | 17 | 0° |
| Q | 17 | 20 | 0° |

SAC 62-627

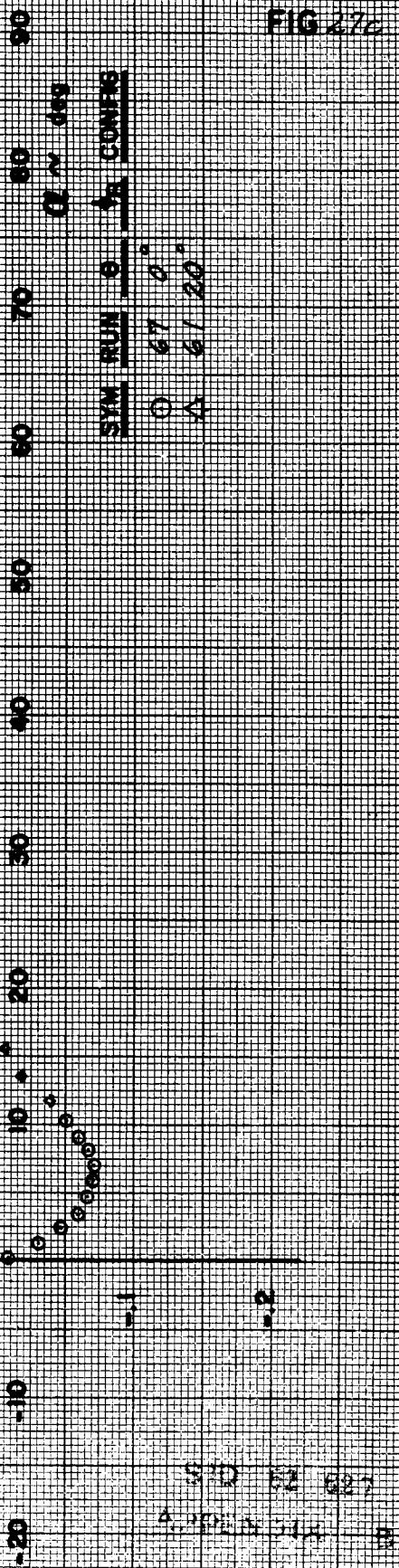
KINSEY

C_L vs Q

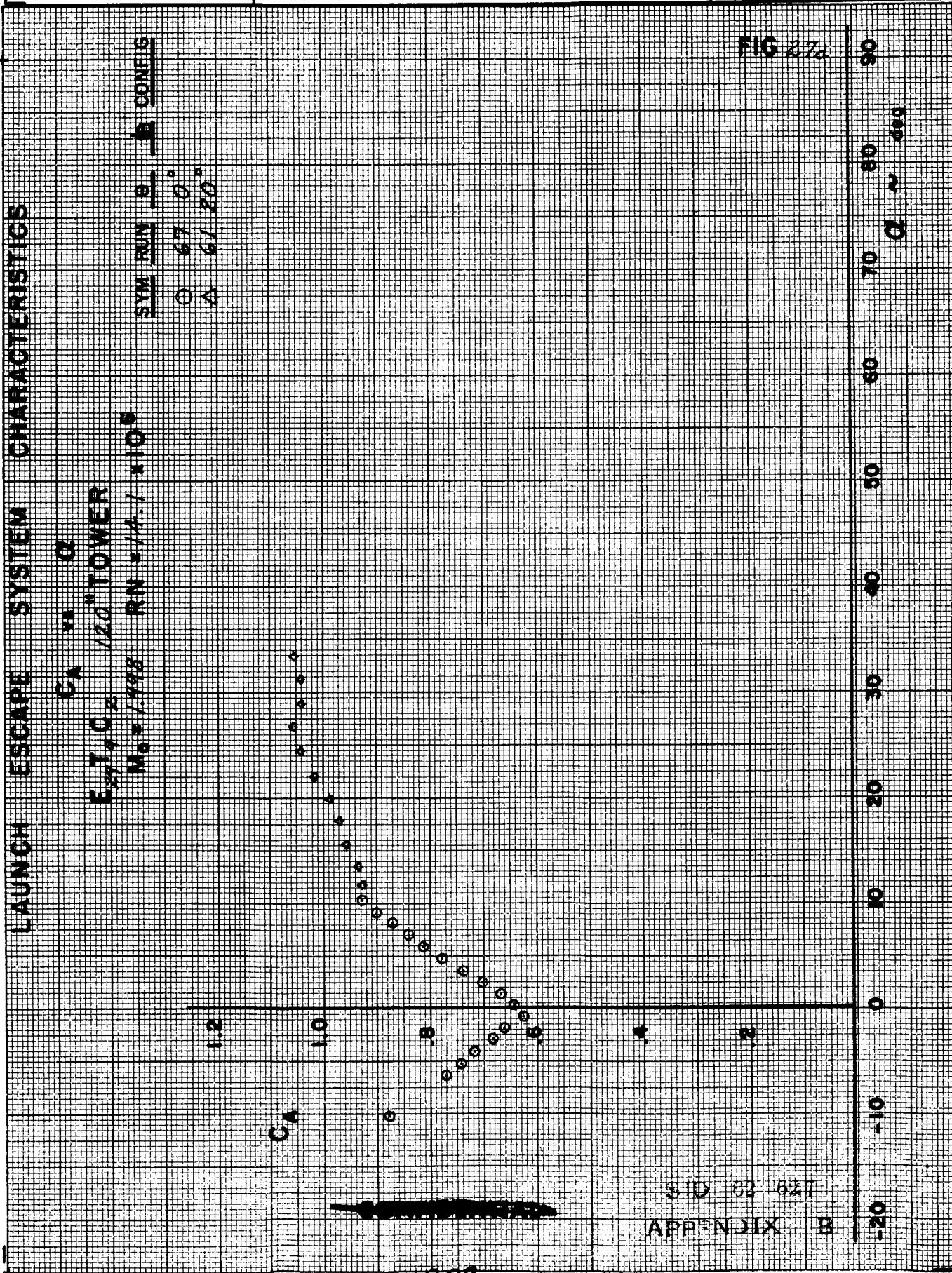
FIG 27b

| | | | |
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LAUNCH SYSTEM CHARACTERISTICS

C₁, C₂, QE₁, E₂, C₂, TOWER
M₁, M₂, R₁, R₂, RA, A₁, A₂, S₁, S₂24.344
24.345C₁ vs Q

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

CN M D
 E2, T₁, C₂, 120° TOWER
 M₀ = 1.993 RM = 1.1 * 10⁶

1.2

1.0

0

0

0

0

0

0

CN

309

SIN RUM 8° - 18 CONFIG

C 57 61 20°

C 4

C 3

C 2

C 1

C 0

C -1

C -2

C -3

C -4

C -5

C -6

C -7

C -8

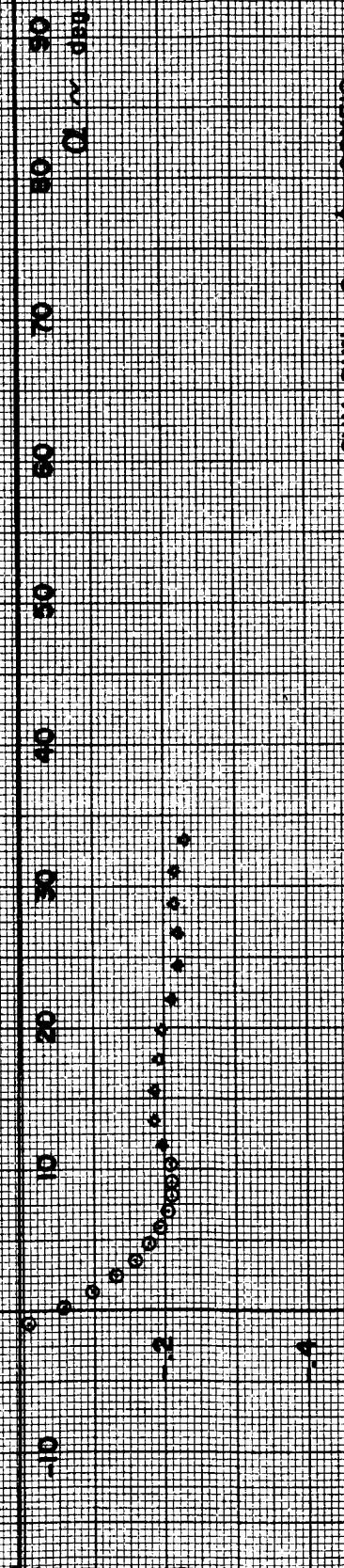
FIG 375

CN vs Q

| | | |
|--------------|----------------------------------------------------------------------------------------------------|-------------|
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_{mA} vs **Q**
E2A/C2 1220" TOWER
M₀ = 1.742 RN = 1.07 A₀ = 108

C_{mA}

SIM RUN $\frac{C}{Q} \times 10^2$ **IN CONIG**
C 67 0
C 61 20°
A

SLD 62 627

KINETIC A

FIG 27

C_{mA} vs Q

| | | |
|--------------|----------------------------------------------------------------------------------------------|------------|
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MODEL NO.

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

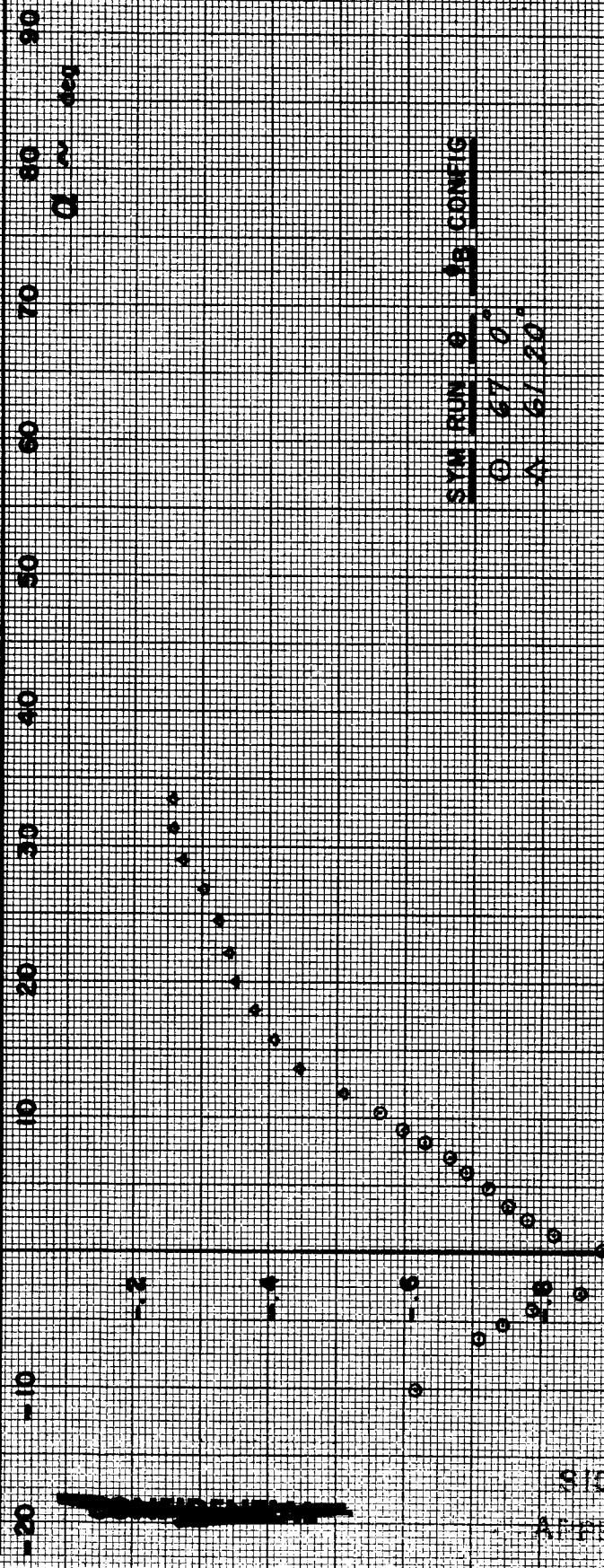
 $\frac{X_{CP}}{D}$ E4412 G2
Mo. 5/22/68TOWER
ON : 4412 LOS

FIG 27a

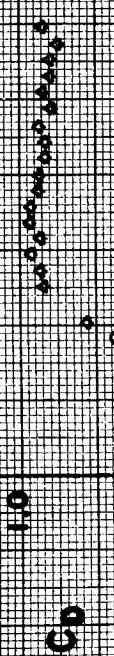
 $\frac{X_{CP}}{D} \text{ vs } \alpha$

| | | |
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FIG 26

C_D vs Q

SYM RIN 8 18 CONF

O 21 0°
△ 35 20°C_D vs QE₃T₄C₂/20° TOWER
M₀ = 0.72

DYNAMIC ESCAPE SYSTEM CHARACTERISTICS

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

 C_L E_L = 0.42
 $M_1 = 0.42$

POSITION

R/N = 184104

 C_L α

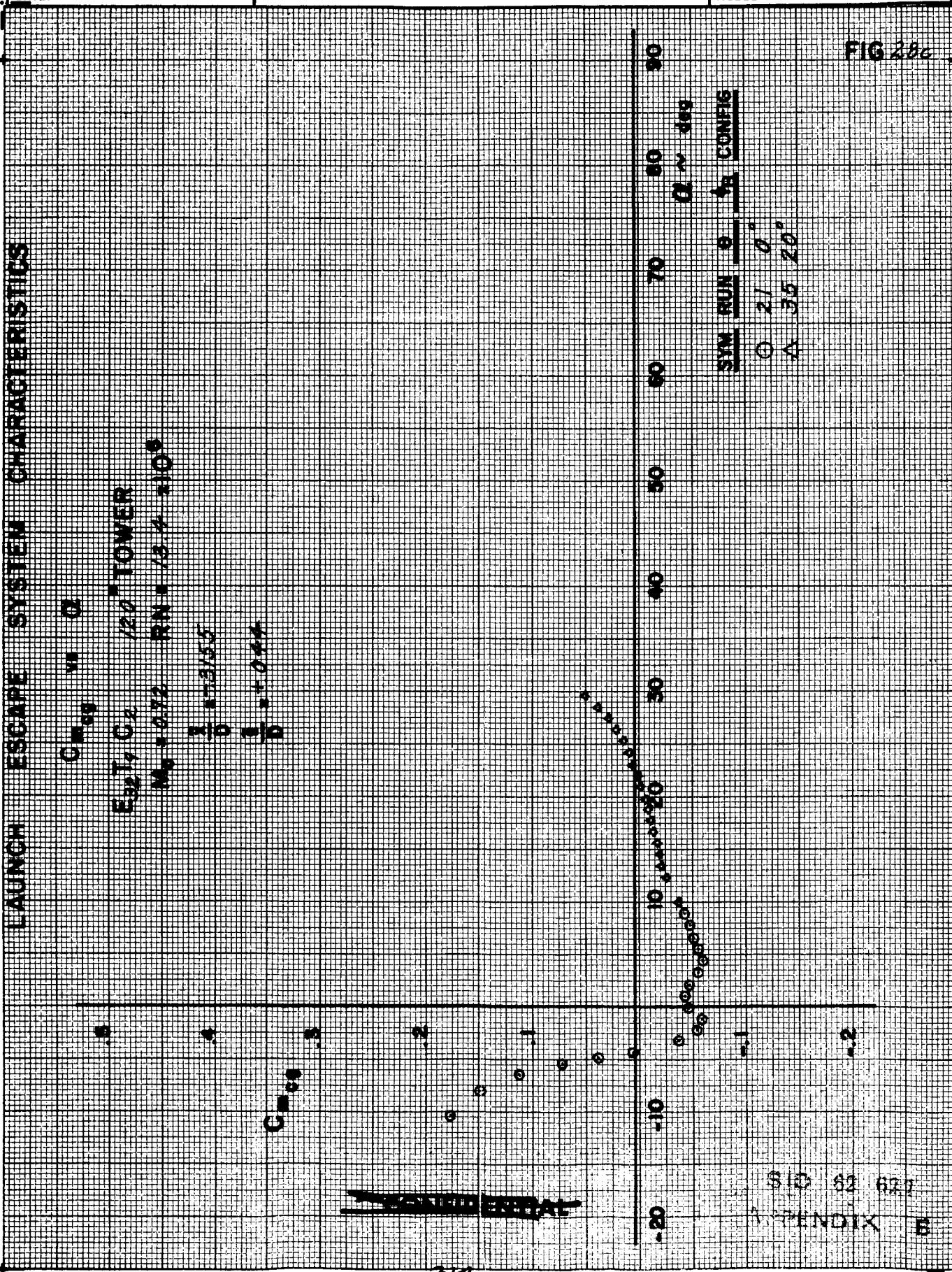
CL vs alpha

FIG 235

SL 62 527

X-15 TEST DATA

| | | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

CA

EJ, C₂

120° TOWER

N₀ = 0.72 R_N = 73.4 * 10⁶

SYM RUN

e / 4 CONING

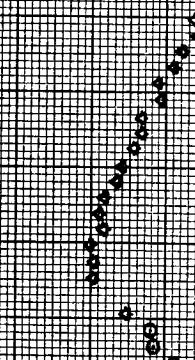
0 21 0°
0 35 20°C₂

FIG 28a

CA vs e / 4 CONING

10 20 30 40 50 60 70 80 90 100

-10 -20 -30 -40 -50 -60 -70 -80 -90 -100

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APPENDIX B

| | | |
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LAUNCHER CHARACTERISTICS

ESTL. ON TOWER
 $M_0 = 0.72$ $R_N = 0.74$ in LOG

 C_N

1.0

 C_N

316

SYM RUN 8 IN CONFIG

O 21 0°
 X 35 20°

80
60
40
20
10
0
-10
-20
-30
-50
-70
-90

FIG 28e

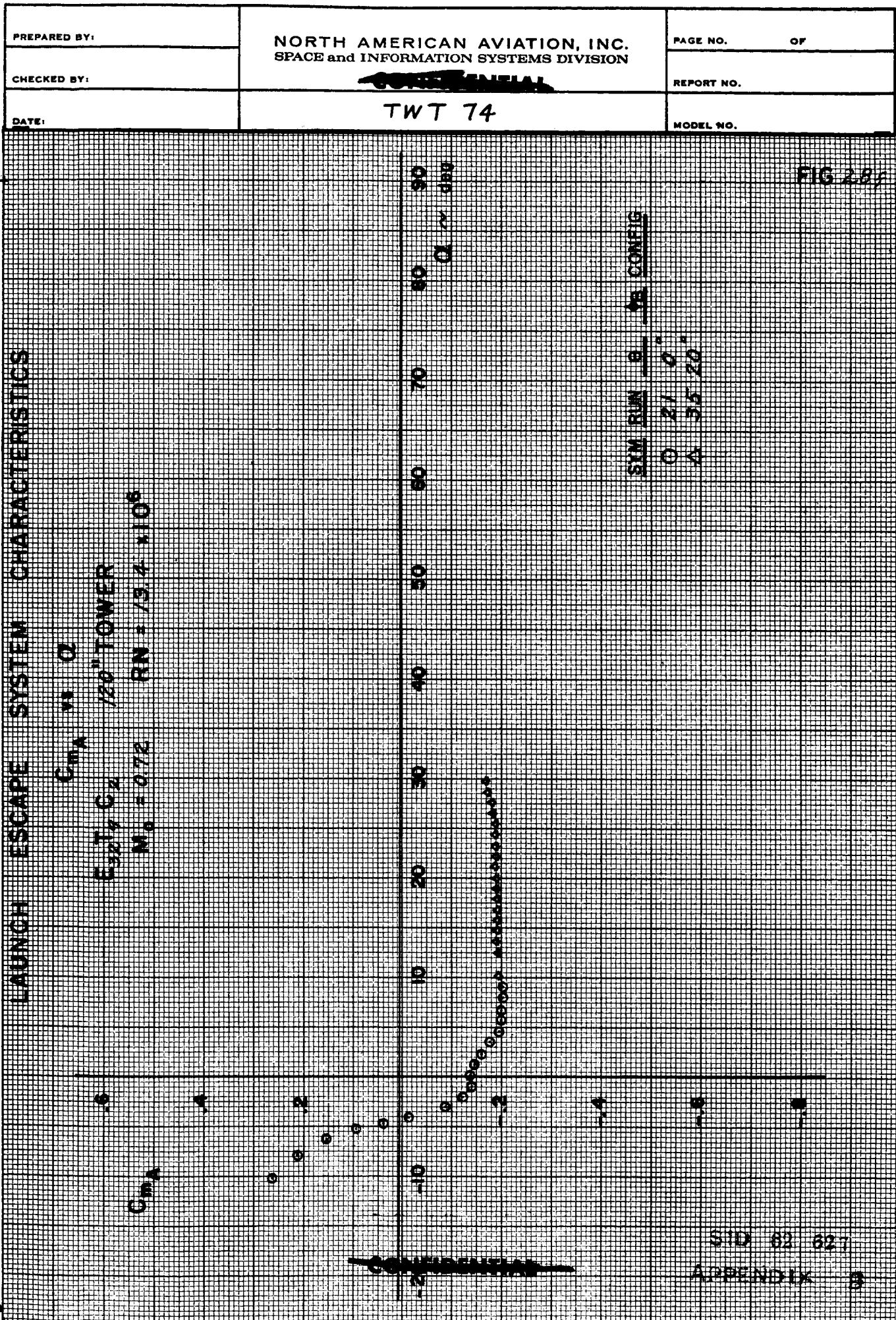
 C_N vs α

| | | | |
|--------------|------------------------------------------------------------------------------------------------|------------|----|
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FIG 2.01

BALLISTIC ESCAPE SYSTEM DATA PAGES

C_{mA} vs α
 $M_0 = 0.72$ $R_N = 13.2 \times 10^6$
 120° TOWER



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APPENDIX E

 C_{mA} vs α

| | | |
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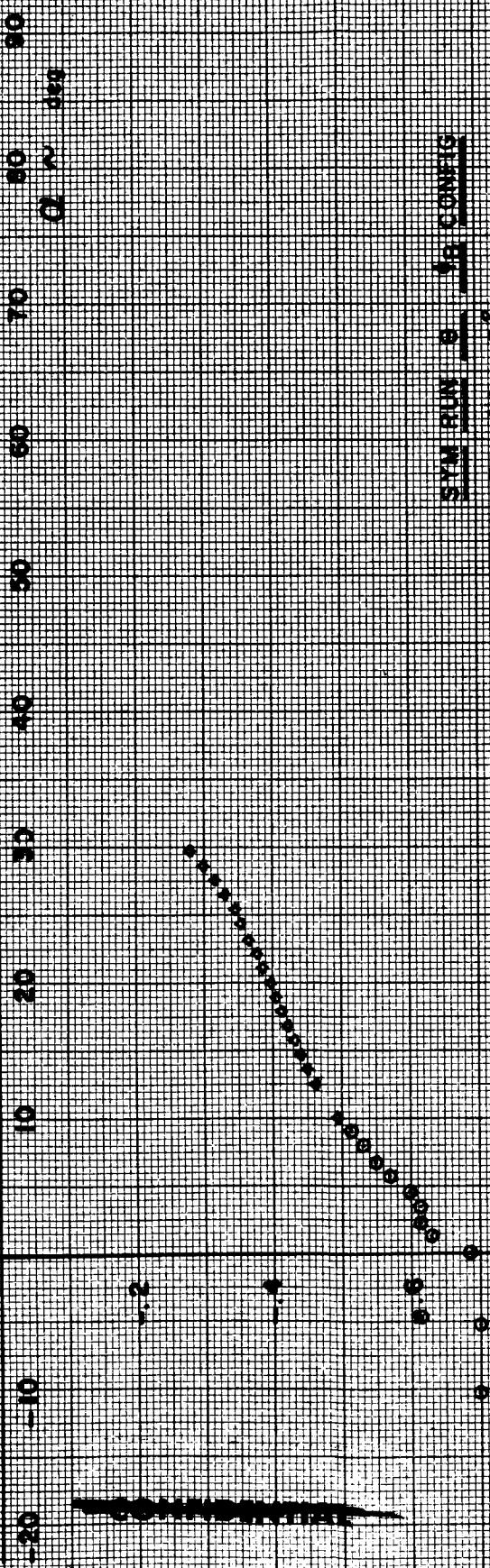
FIG. 28g

 $\frac{X_{CP}}{D} \text{ vs } \alpha$

EFFECT OF VARIOUS ANGLES OF INCIDENCE ON THE COEFFICIENT OF DRAG

122-11 C-2
M. 3.72
10 N. 3.52 3.10X_{CP}

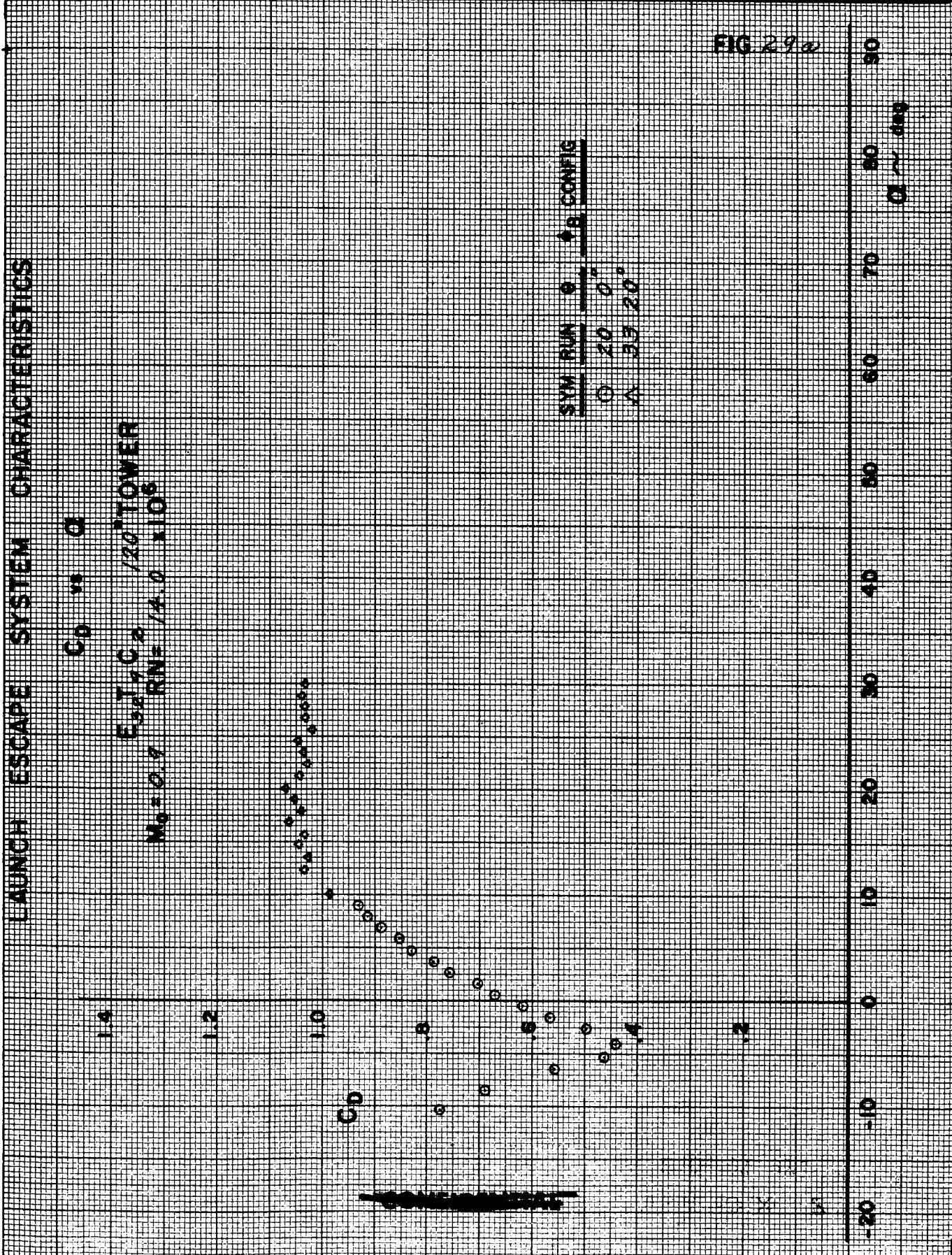
1033-G-8 NEW 5-62



510 82 627

5 - REFERENCES

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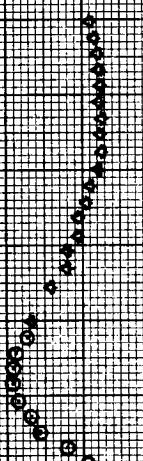


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AIRCRAFT SYSTEM CHARACTERISTICS

 $C_L \propto \alpha$

$E_{22} = C_2 / 2\pi R^2$
 $R_N = 14.4$ MILES
 $M_\infty = 0.9$



0 10 20 30 40 50 60 70 80

0 10 20 30 40 50 60 70 80

SYM. RUN @ 1g CONFIG

O 20 0°
 A 33 23°

FIG 2.9b

 $C_L \propto \alpha$

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

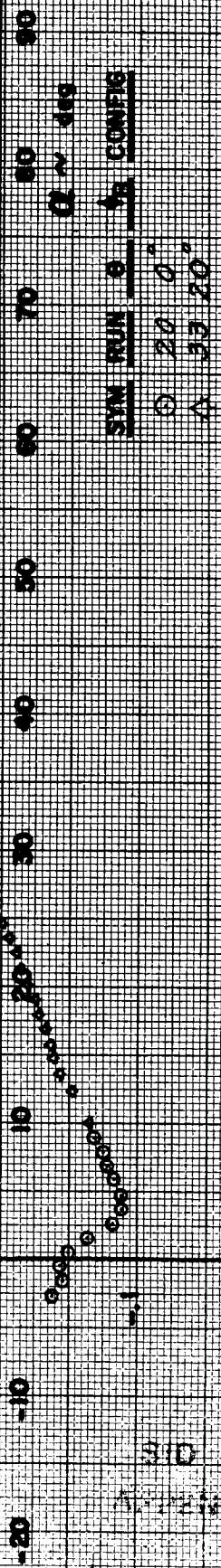
C_{mg} vs Q

E77 C2 120° TOWER
M6 S0.1 RN 14.0 108

$\frac{1}{6}$ - 3/35

C_{mg}

100 80 60 40 20 0



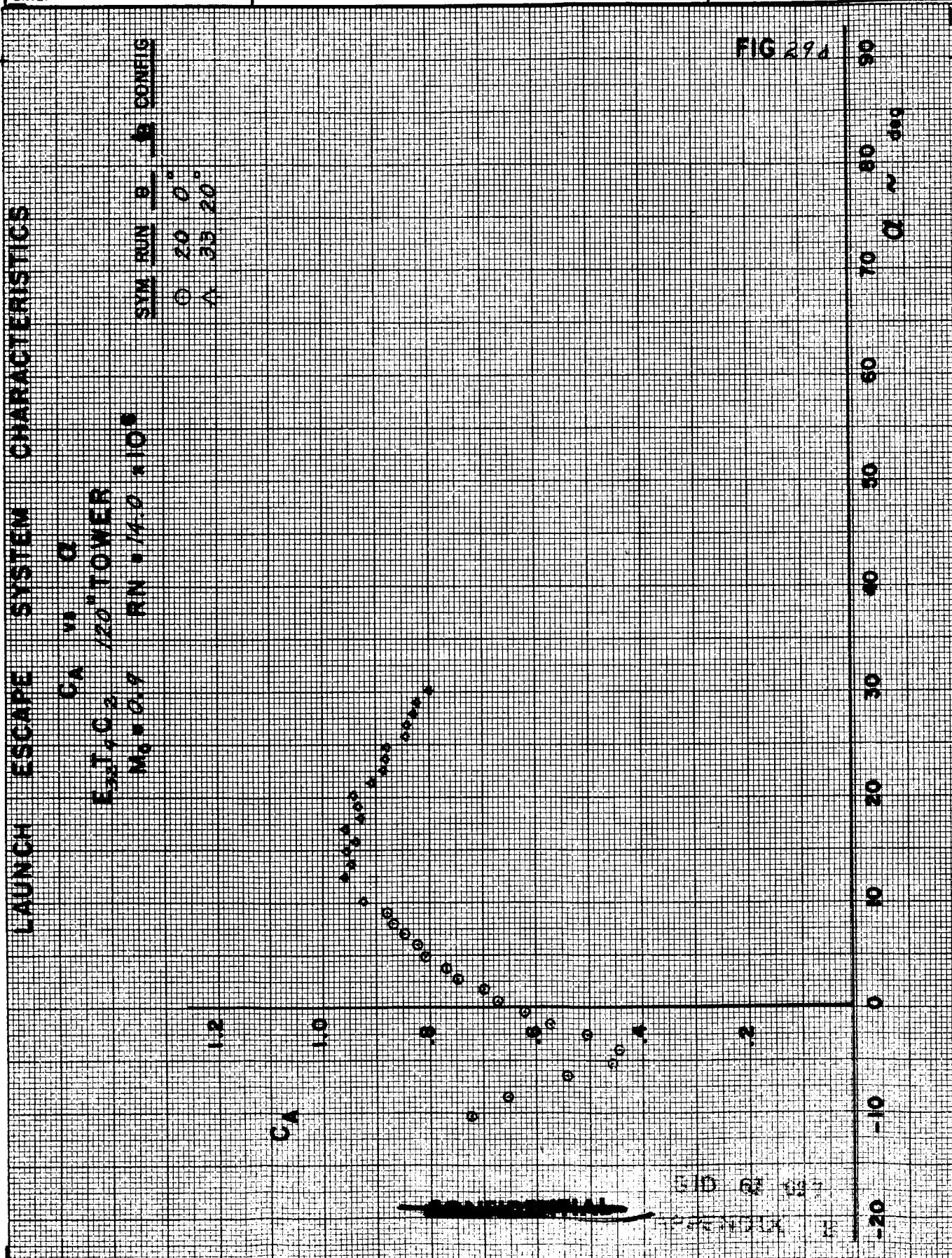
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VIC 12 14 8

FIG 27e

C_{mg} vs Q

| | | | |
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LAUNCHES - ESCAPE SYSTEM CHARACTERISTICS

Fuel: $C_N = 0.8$
 $C_2 = C_2/100$ FLOWER
 $M_0 = 0.7$ $R_N = 14.0 \times 10^8$

SYM RUN $\frac{8}{8}$ IN CONFIG 20° 0° 30° 20°

0 10 20 30 40 50 60 70 80 90 100
 0 10 20 30 40 50 60 70 80 90 100

FIG 27e

Cn vs Q

| | | |
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MANUFACTURER'S CERTIFICATIONS

Expt 103
M. No. 717
C_{mA} vs C_q
1/10 TOWER
RN = 14.0 * 10⁶

SIM RPN 9.4 CONCIS
 20 0°
 33 20°

FIG 29F

C_{mA} vs C_q

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

X CP
0E32 TOWER
No. 4
AEROSPACEX CP
090
80
70
60
50
40
30
20
10
0~~CONFIDENTIAL~~

SYM RUN 8-18 CONIC

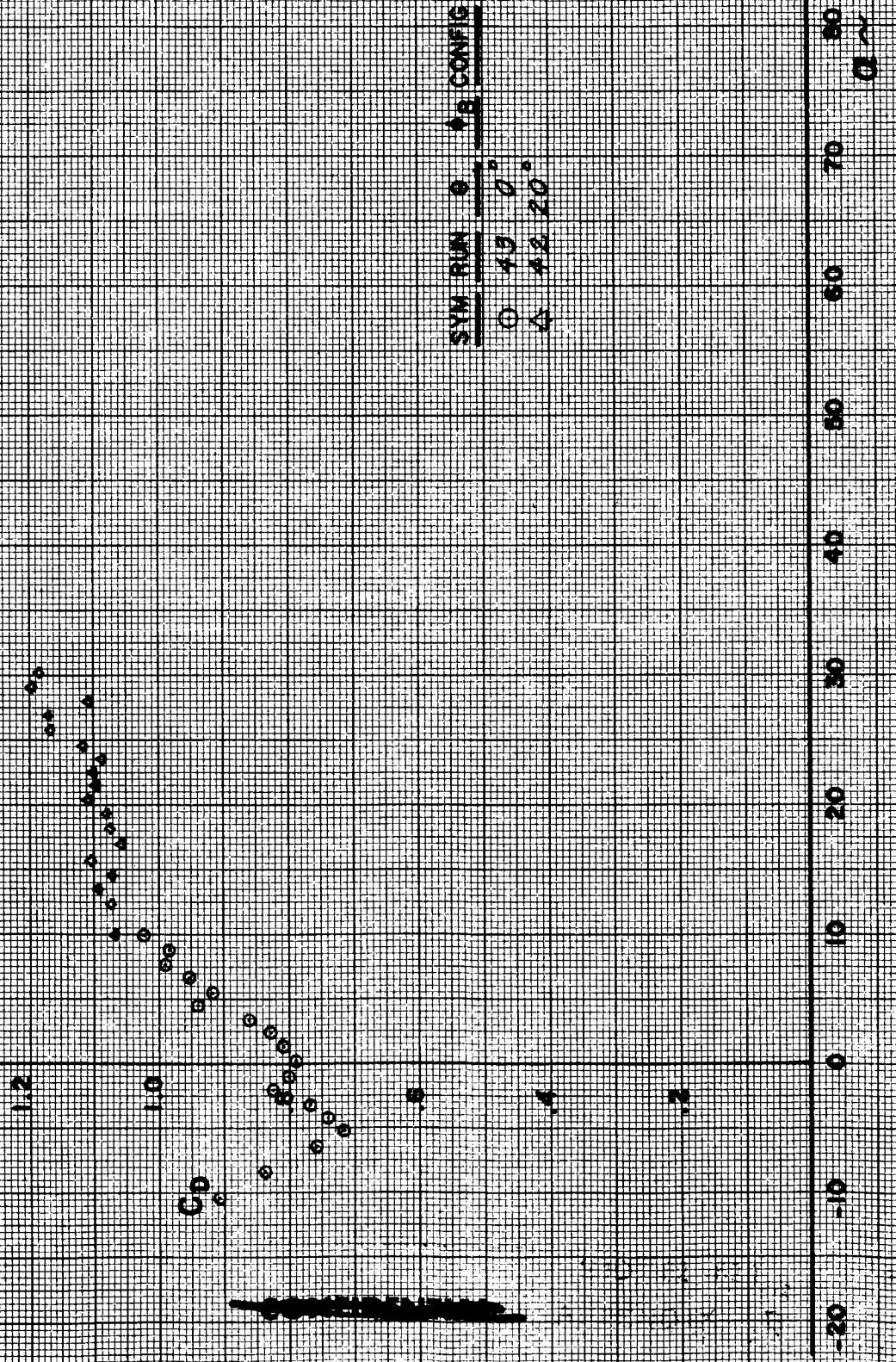
C 20 0²
A 39 20SID 62 677
X 10 IN A DAY 8

FIG 2%

X CP vs. a

| | | |
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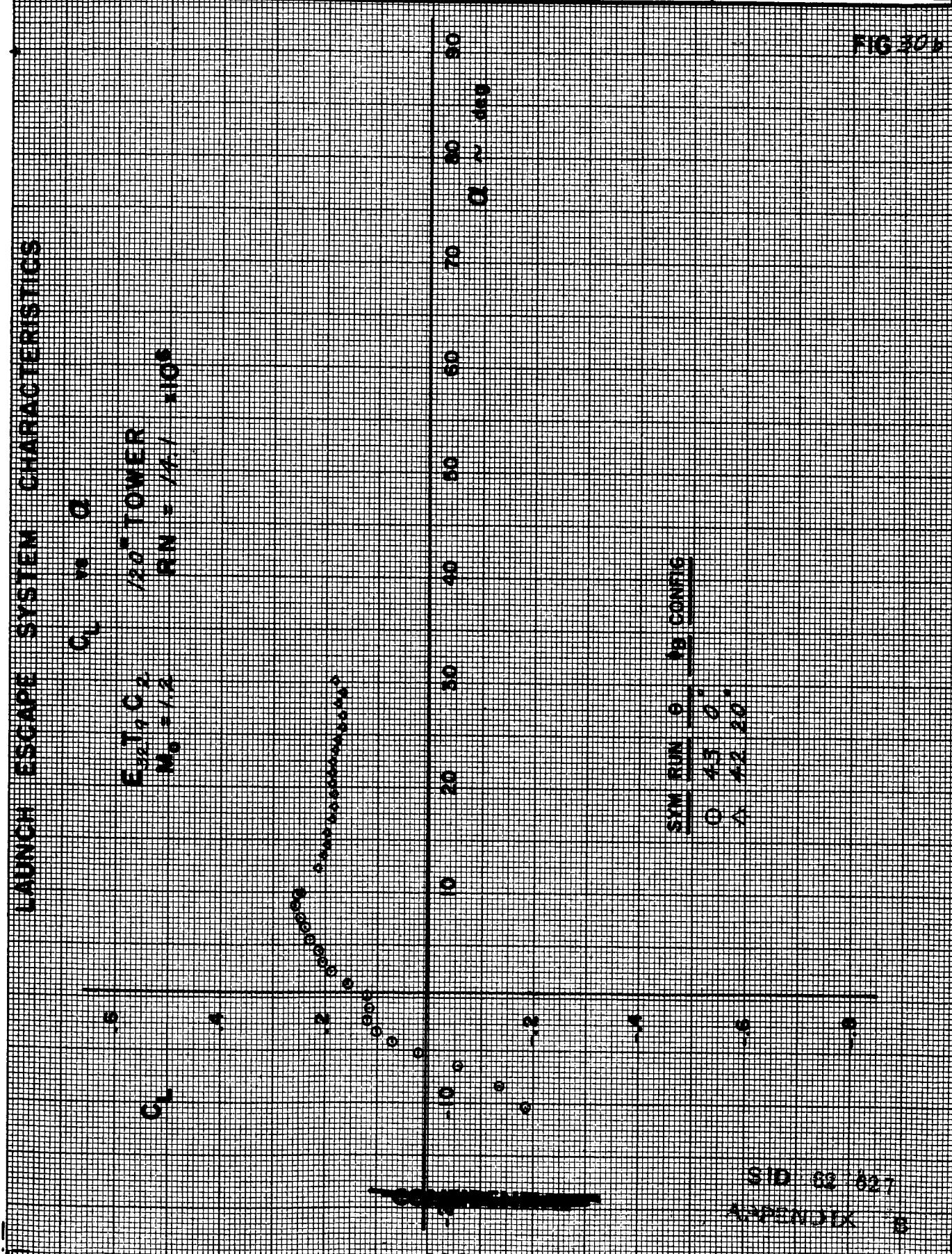
LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E₂T₁C₂ / 4.1 x 10⁶ TOWERM₀ = 1/2 R₀ = 1/4 R₁ = 1/8 R₂ = 1/16 R₃ = 1/32

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_L vs α
 $E_2 T_2 C_2$
 $M_0 = 1/2$
 $Q_N = 1/4$
 TOWER



SID 02 027
AIRCRAFT

C_L vs α

FIG 306

| | | | |
|--------------|-------------------------------------------------------------------------|--|-------------|
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_n(q)
EAST, C₂ 120° TOVER
W₀ = 1.21 **R_N = 1.41** **S₀ = 0.8**
W₀ = 3.55 **R_N = 3.35**
10 min

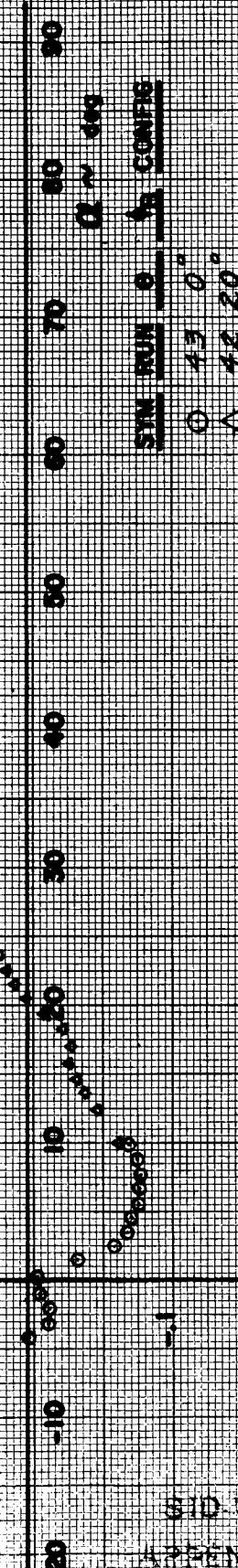
C_n(q)

100 200 300 400 500

100 200 300 400 500

100 200 300 400 500

100 200 300 400 500



S10-93 527

B KENNEDY

C_n(q) vs q

FIG 30c

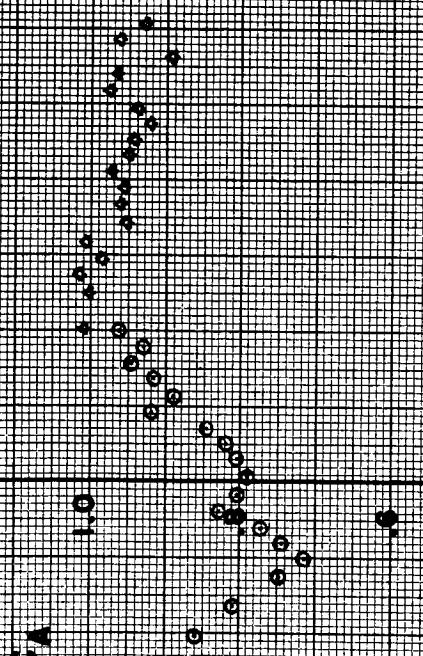
| | | |
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LAUNCH ESCAPE SYSTEM DYNAMIC TESTISTICS

CA vs α
52 ft. 02 sec
CA vs α
420° TOWER
5 ft. 02 sec
CA vs α

SYM RUN # CONNSTS

1 2 3
4 5 6 7
8 9 10 11
12 13 14 15



CA

SID 62 627

RELEASER

G

G

G

| | | |
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LUNGE ESCAPE SYSTEM CHARACTERISTICS

EAT/CB/22 TOWER
M. 5/2 RN = 421 * 10⁶

100

100

C*

330

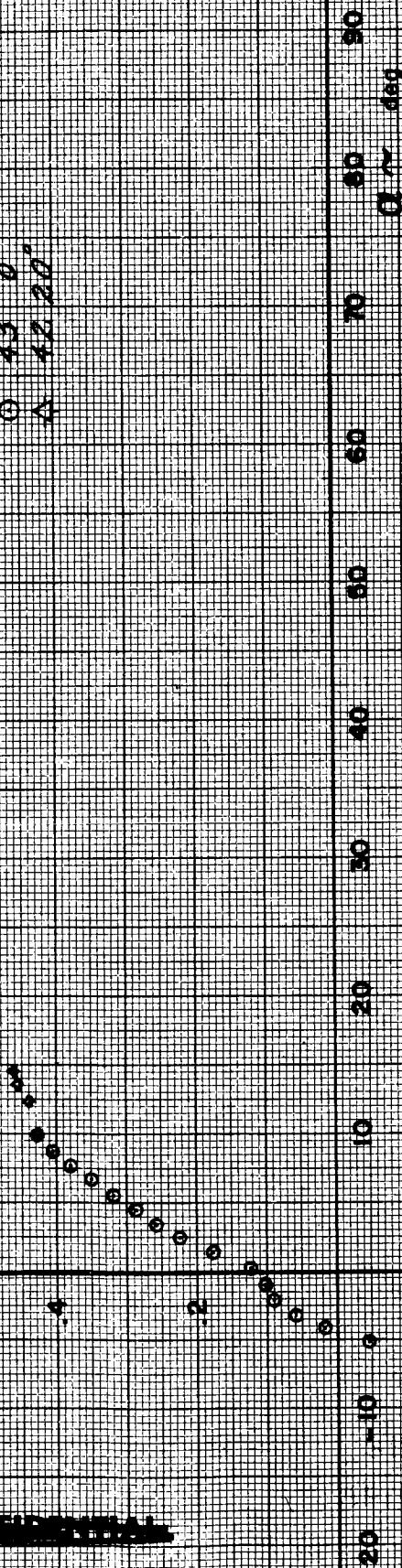
SYM BURN 9 1/2 CONFIG

FIG 30e

CN vs Q

| | | | | |
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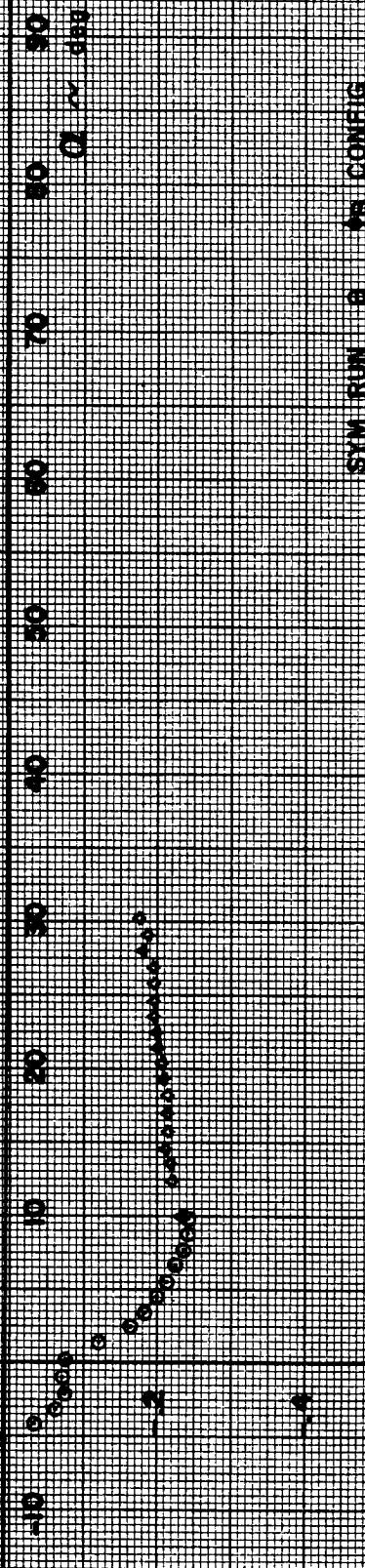
FIG. 30A

LAUNCH SYSTEM CHARACTERISTICS

Crn. 1 Crn. 2
 CTT-C2 122" TOWER
 RN 4/4 / 108
 N. N. - 1/2

Crn. 3

Crn. 4



SYM RUN

IN

MM

CONE(S)

IN

MM

0 40 0

A 42 20

3/16 62 62
APPENDIX B

CrnA vs CrnB

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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

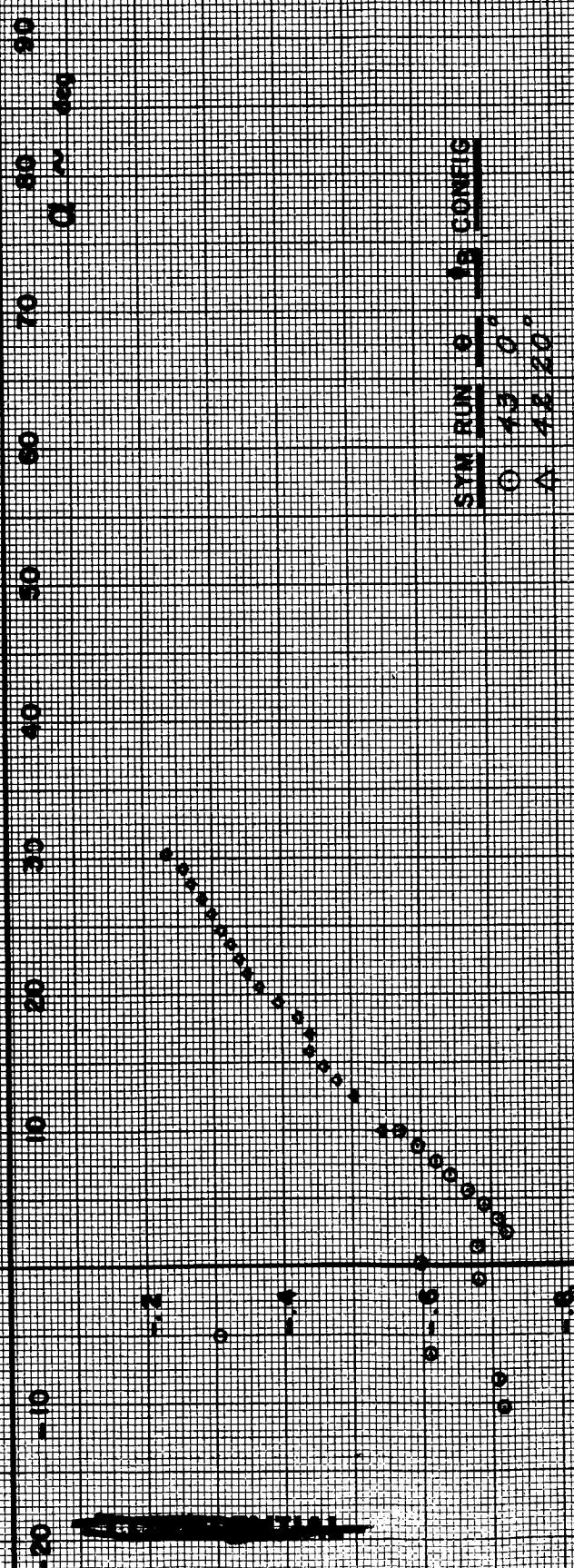


FIG 30g

 $\frac{X \text{ COP}}{D} \text{ vs } \alpha$

32-627

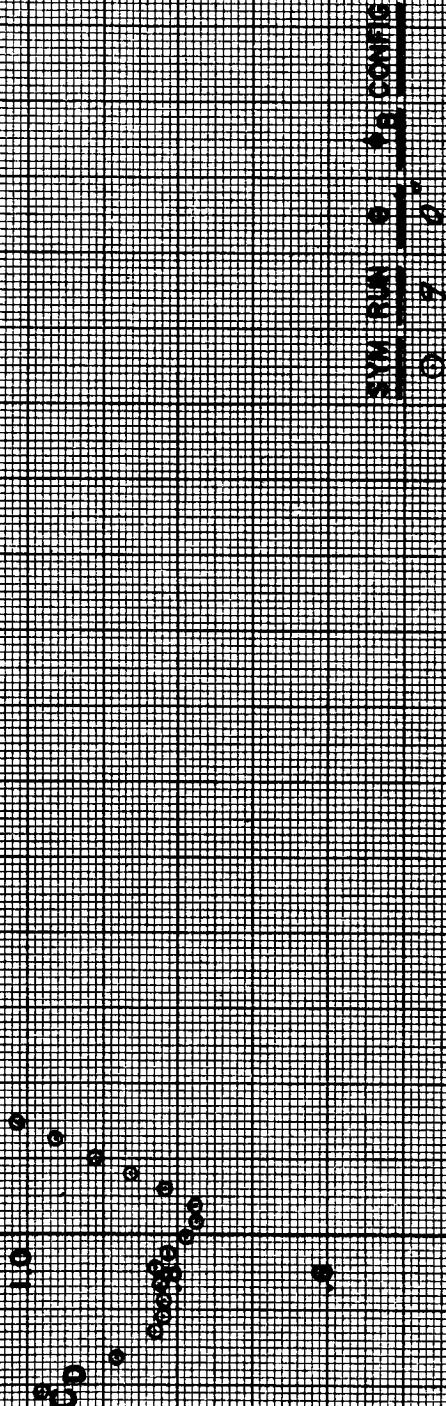
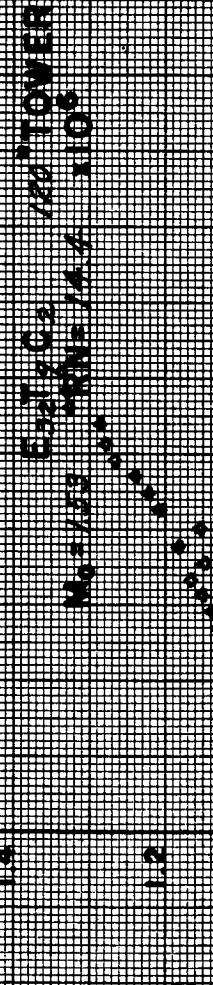
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CHARTS FOR SYSTEMS TESTS

5-24-62 G-27 TOWER
144.2100 144.2125 144.2150 144.2175 144.2200

C vs Q



S10 62 627

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Cd vs Q

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C_L vs α
 E-102-0333
 JAN - 74 - 100

 C_L

TEST CONDITIONS

100% ΔV
 $\dot{m} = 1.5 \text{ lb/sec}$
 $\rho_{in} = 1.0 \text{ lb/ft}^3$
 $\rho_{out} = 0.001 \text{ lb/ft}^3$
 $\theta = 0^\circ$
 $\beta = 0^\circ$
 $g = 386 \text{ ft/sec}^2$
 $T = 77^\circ \text{ F}$

SIM. PITCH
 $\alpha = 0^\circ$
 $\alpha = 14.23^\circ$

TR. PITCH
 $\alpha = 0^\circ$
 $\alpha = 14.23^\circ$

FIG 31D

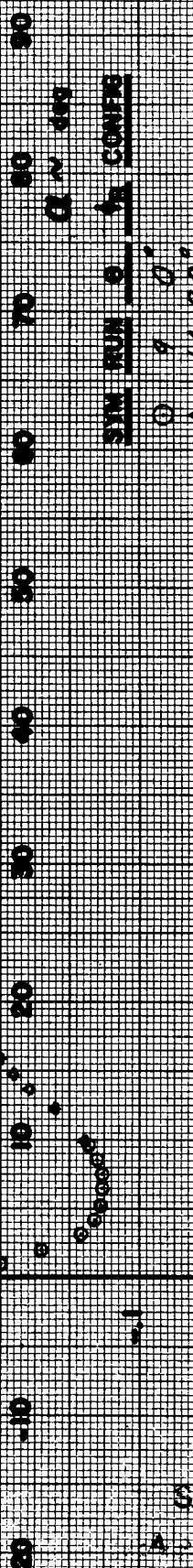
 C_L vs α

| | | |
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LAUNCH SYSTEM CHARGE DETAILS

617, C2 720 TOWER
N 48 13.33' R N 12 22.80'
W 115 37.85' E 115 37.85'

Q Q Q Q



SID 82 637

XLEN-A B

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

LAUNCH ESCAPE SYSTEM
CA "B" TOWER

MAX/SEC. PNU • 1/4 A * 100

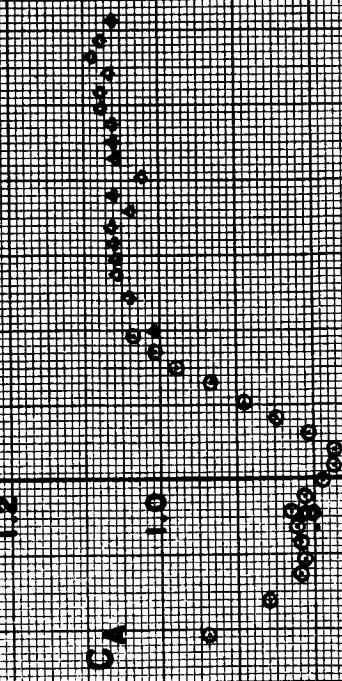
SYN RIN 8/10
0 5 10
0 14 20

FIG 5/d

CA vs Q

SND 62 637
APPENDIX E

-20 -10 0 10 20 30 40 50 60 70 80 90 deg

| | | |
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LIFTING SURFACE CHARACTERISTICS

ESCAPE SYSTEM TOWER
 $C_L = 1.2$ $C_D = 0.02$ C_D^*
 $M_0 = 1.39$ $R_N = 124.4$ 10^6

SYM RUN # 8 • B CONFIG

0° 9° 18° 27° 36°
 O A V V V V

0 10 20 30 40 50 60 70 80 90 100
 α deg

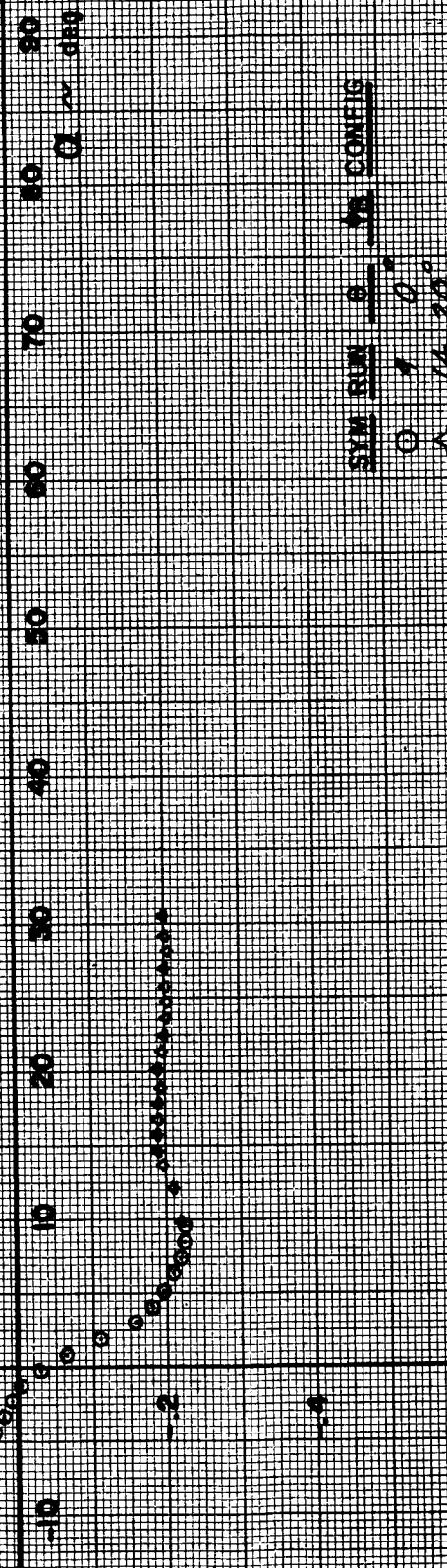
FIG 3/e

C_N vs. α

| | | | |
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EATING ESCAPE SYSTEM CHARACTERISTICS

C = C₁
 C = C₂
 E₁ T₁ C₂
 M₁ = 1/25
 E₂ T₂ C₁
 RN = 1/44 X 10⁶
 1/20" TOWER



SID 02 627

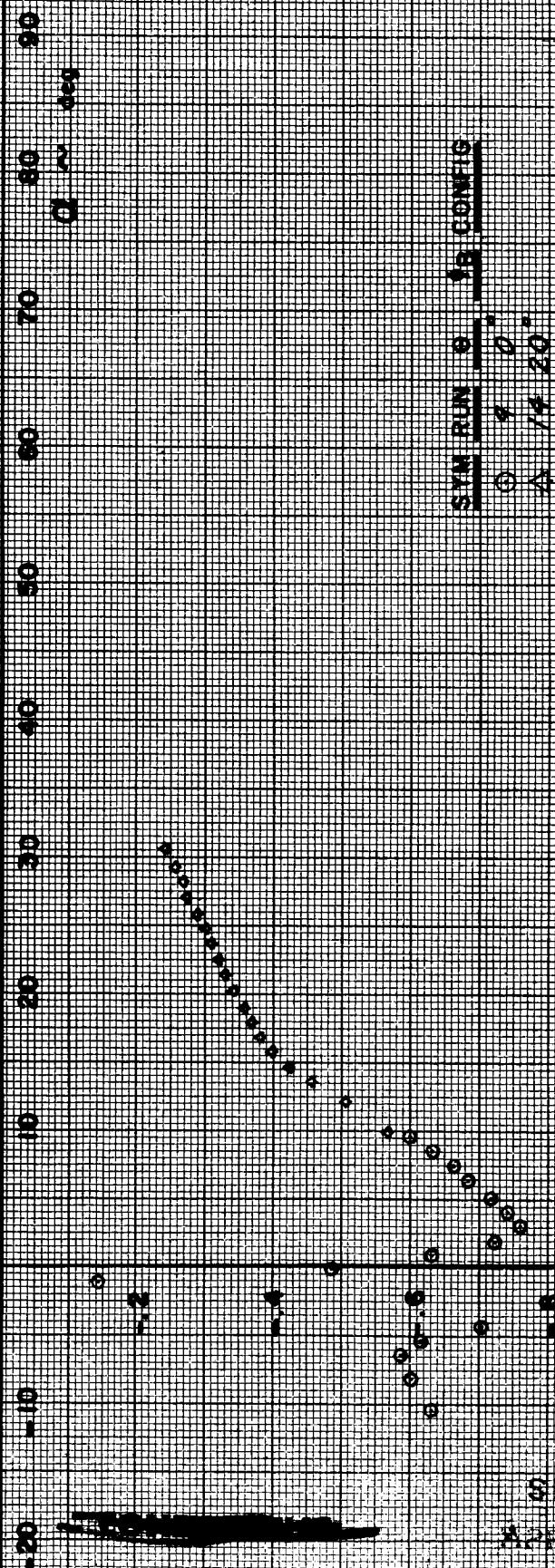
APPENDIX B

C₁ vs C₂

FIG. 21

| | | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

X CP
DE22 TOWER
No. 1253
PN: 1424-103X CP
D

S15 S2 S3 S7

X100-X100-X100-X100

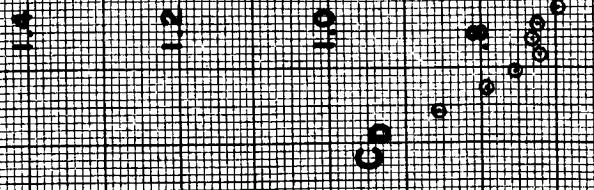
FIG 34g

X CP vs D

| | | |
|--------------|----------------------------------------------------------------------------------------------------|-------------|
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

2234C-108
No. 31776
20° TOWER



| SYM RUN | 0° CONFIG | 65° 0° | 65° 20° | 65° 40° | 65° 60° | 65° 80° |
|---------|--------------|-----------|------------|------------|------------|------------|
| 0 | 4 | 4 | 4 | 4 | 4 | 4 |
| 10 | 4 | 4 | 4 | 4 | 4 | 4 |
| 20 | 4 | 4 | 4 | 4 | 4 | 4 |
| 30 | 4 | 4 | 4 | 4 | 4 | 4 |
| 40 | 4 | 4 | 4 | 4 | 4 | 4 |
| 50 | 4 | 4 | 4 | 4 | 4 | 4 |
| 60 | 4 | 4 | 4 | 4 | 4 | 4 |
| 70 | 4 | 4 | 4 | 4 | 4 | 4 |
| 80 | 4 | 4 | 4 | 4 | 4 | 4 |

FIG 32A

Note: 4 Blowout Run

0 = Blowout Run

Cd vs Q

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APPENDIX E

| | | |
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FIG 32 b

LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E-2A TOWER
ON = 14.0 VDC
OFF = 13.0 VDC

C_L**C_D****C_S****C_T**

0.0 10 20 30 40 50 60 70 80 90 100

SIN RIM C_L vs C_D

○ 65 0.0
 X 63 20.0
 X 64 20.0

No. 2 : A 3200 ft. REFLIN on 5100 ft.

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APPENDIX E

C_L vs C_D

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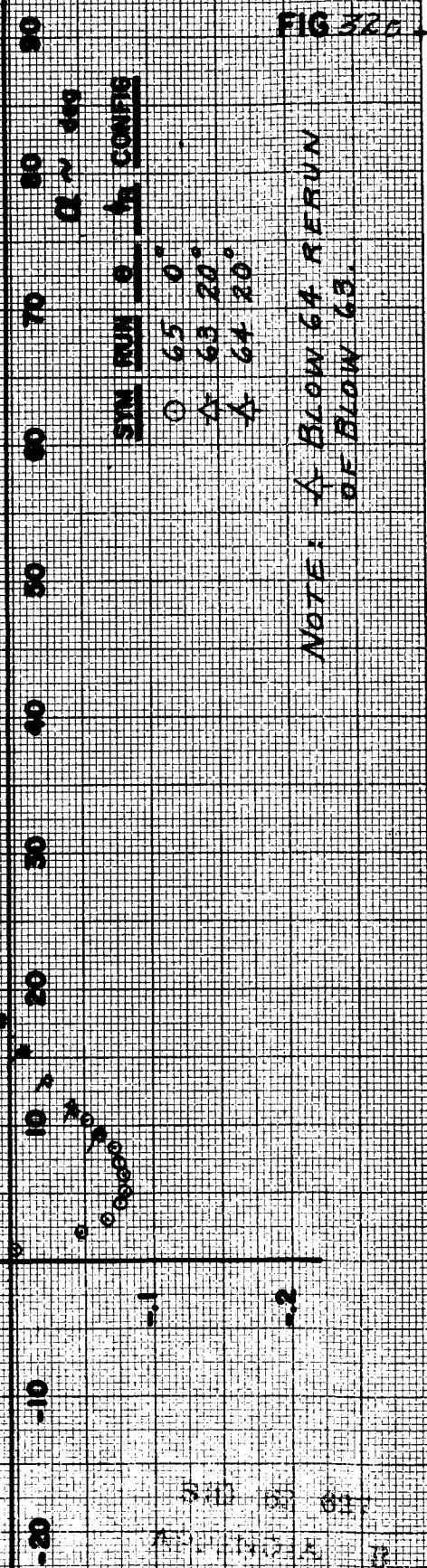
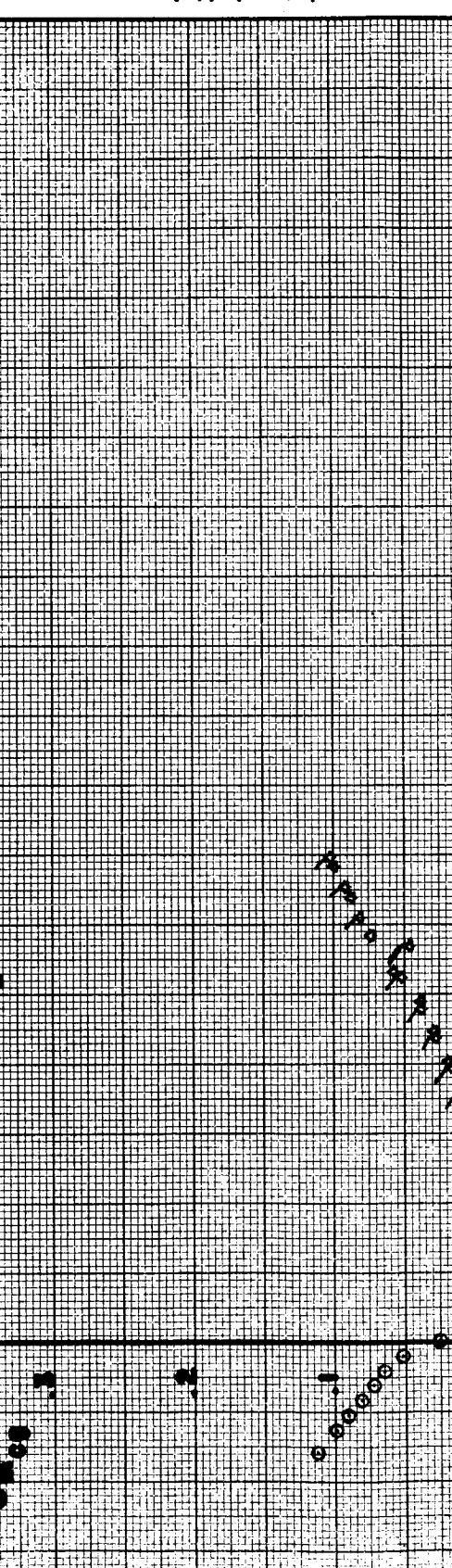
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MODEL NO.

LAUNCH SYSTEM CHARACTERISTICS

C₁ = 0E₂T₂C₂ 12.0° TOWER
W₂ = 7.925 R₂ = 14.0 z = 10°1/6 + 3/5 t₂C_{max}

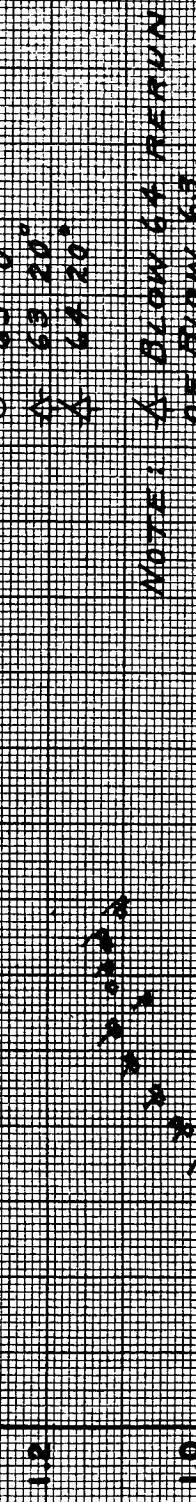
Crng vs A

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

E_{CO_2} , C_2 / 20% LOWER
Mach 1.478 R/N = 1.0 * 10⁶

SYM RUN # 14 CONF 9



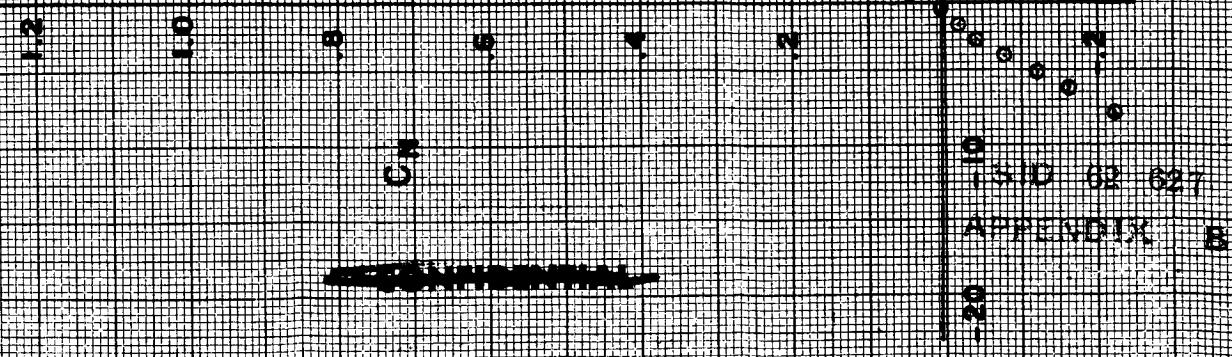
543

CA vs C

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

C₁ vs C₂
TWT 74 TOWER
W₀ = 1/373 R N = 1/20 * 10⁻⁸



NOTE: A 45deg GZ DERIV

0.00 0.25 0.50 0.75 1.00 1.25 1.50 1.75 2.00 2.25 2.50 2.75 3.00 3.25 3.50 3.75 4.00 4.25 4.50 4.75 5.00 5.25 5.50 5.75 6.00 6.25 6.50 6.75 7.00 7.25 7.50 7.75 8.00 8.25 8.50 8.75 9.00 9.25 9.50 9.75 10.00

FIG 3/2

CN vs C

| | | |
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LAUNCH ESCAPE SYSTEM CHARACTERISTICS

EXT C_m
C_m vs. Q
N₀ = 1778 RN = 14.0 * 10⁶

C_m

-10 -5 0 5 10 15 20 25 30 35 40 45 50

SIM RUN # 9 Δ CONFIG

0 65 0°
1 63 20°
2 64 20°

Note: At 64° on 64° rerun
at 63° on 63°

FIG 52

C_mA vs. Q

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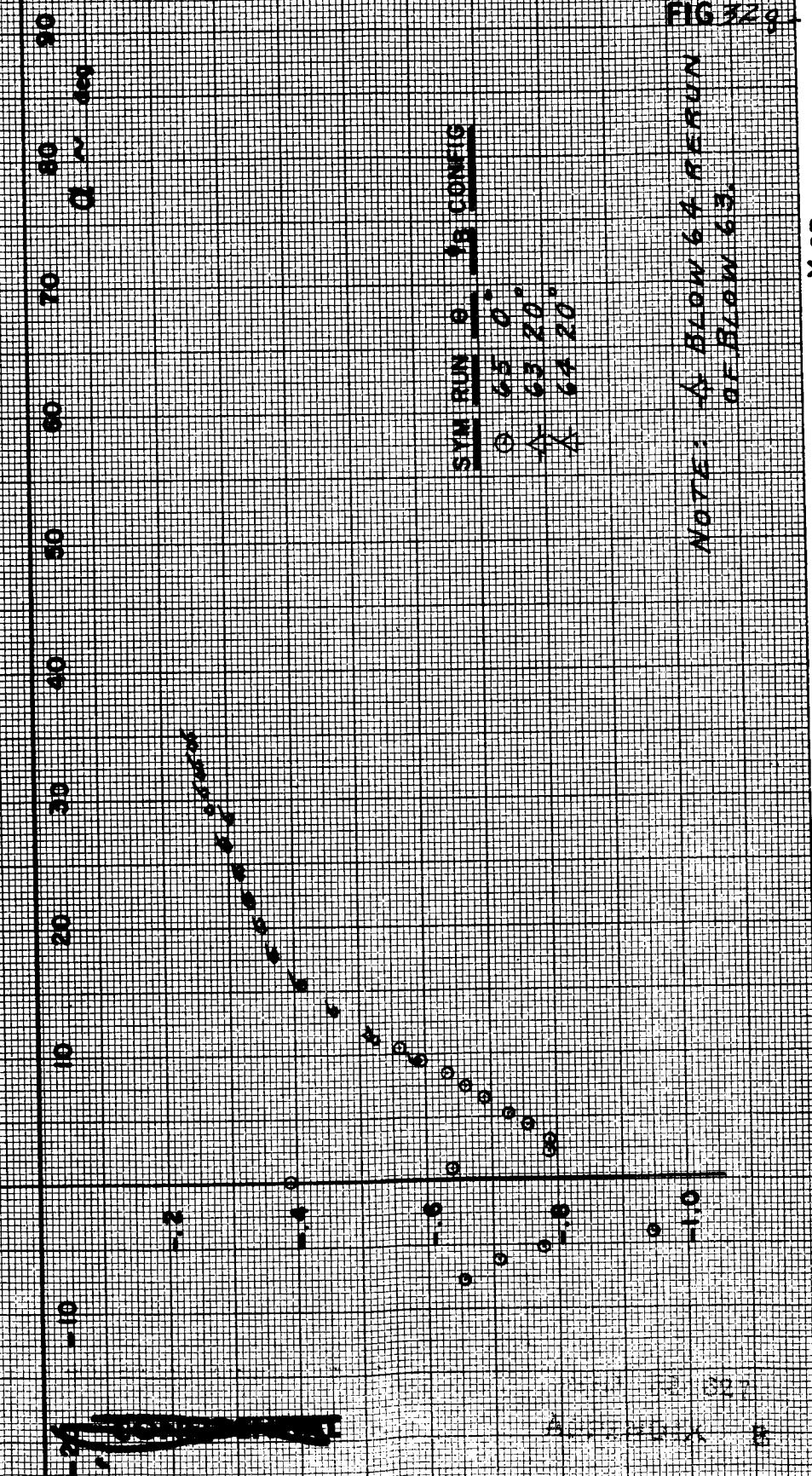
REPORT NO.

DATE:

TWT 74

MODEL NO.

LAUNCH CHARACTERISTICS

EATZ Model 1728 P/N - 140 SIGS
120° POWERXCP
DXCP
D

XCP "a" D

FIG 12g
NOTE: A BLOW 64 REAR
BLOW 63.

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FIG. 33

SCHLIEREN PHOTO AT $M = 2.0$
LAUNCH ESCAPE SYSTEM CONFIG, $\alpha = 0^\circ$
(E25 T9 C2)



FIG 34

SCHLIEREN PHOTO AT $M = 2.0$
LAUNCH ESCAPE SYSTEM CONFIG, $\alpha = 0^\circ$
(E29 T9 C2)

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FIG 35

SCHLIEREN PHOTO AT $M = 2.0$
LAUNCH ESCAPE SYSTEM CONFIG. $\alpha = 0^\circ$
(E32 T9 C2)

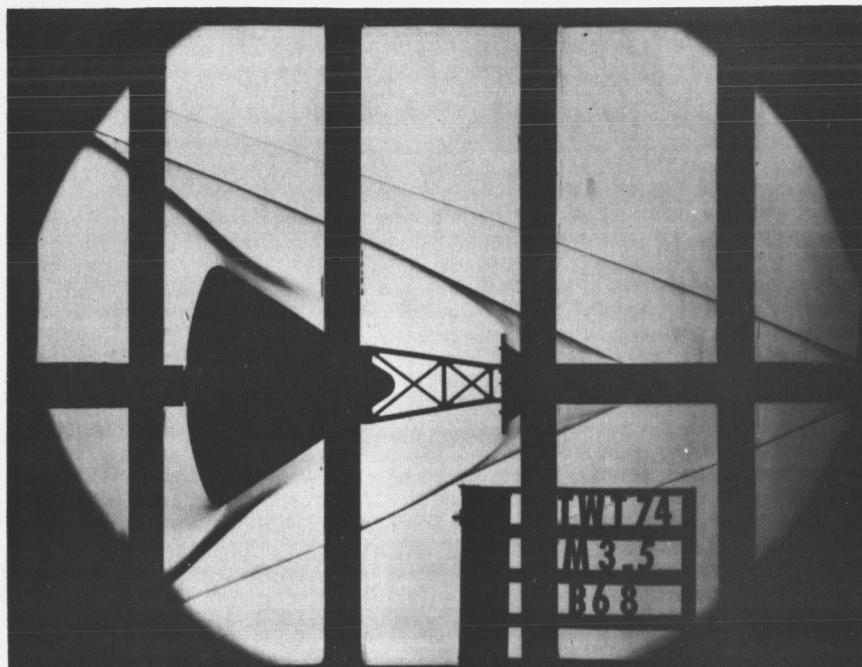


FIG 36

SCHLIEREN PHOTO AT $M = 3.5$
LAUNCH ESCAPE SYSTEM CONFIG. $\alpha = 0^\circ$
(E23 T9 C2)

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